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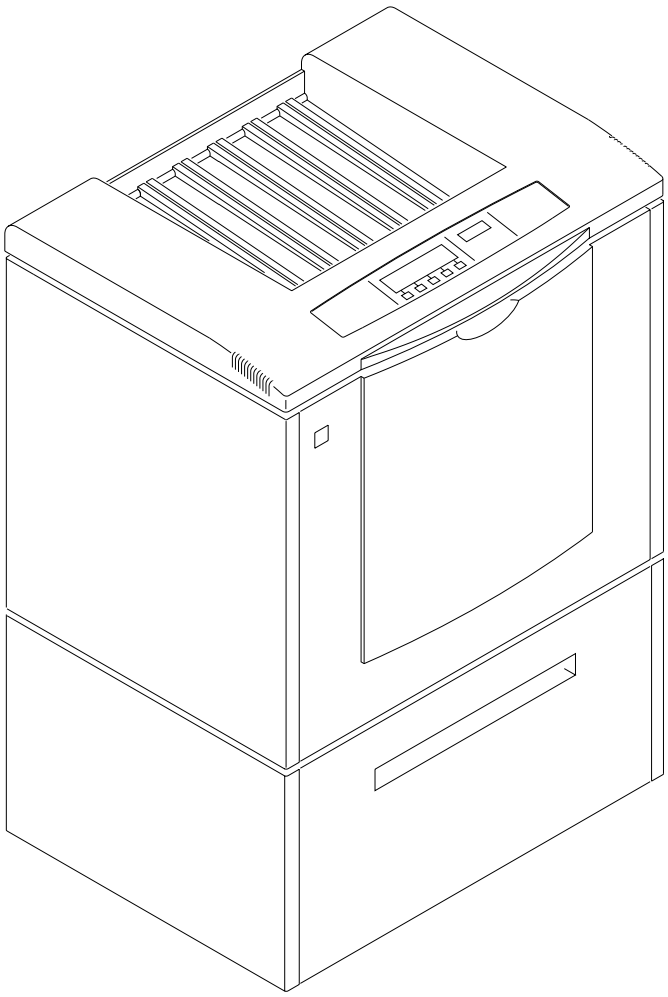
OPERATOR MANUAL
for the
Kodak X-Omat 3000 RA Processor



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HEALTH IMAGING

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Warning

To avoid hazardous conditions, keep floors and floor coverings around your *Kodak X-Omat* Processor and associated drains clean and dry at all times. Any accumulation of fluids from mixing tanks, drain lines, etc, should be cleaned up immediately. In the event of an accumulation of liquid due to backup, overflow, or other malfunctions of the drain associated with your *Kodak X-Omat* Processor, call a plumber or other contractor to correct any problem with the drain. Kodak accepts no responsibility or liability whatsoever for the serviceability of any drain connected to or associated with a *Kodak X-Omat* Processor. Such drains are the sole responsibility of the customer.

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Introduction

Intended Audience

This manual is written for all users of the *Kodak X-Omat* 3000 RA Processor. The novice user needs only a basic working knowledge of automatic radiographic film processors in order to understand the instructions and procedures outlined in this manual. The experienced user may only need to refer to this manual when using some of the features and functions new to the 3000 RA Processor.

How To Use this Manual

The manual is organized by topics. Each topic contains all the information you need to perform the given task:

- instructions for navigating through the required menus
- sample menu displays that appear after each key selection

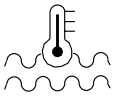
Symbol Key

Service Indicator

Replenishment Indicator

Equipotential Ground

Approved for Patient Contact


Developer Temperature Indicator

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Overview

Product Description

The *Kodak X-Omat* 3000 RA Processor is a general-purpose radiographic processor, which uses a conventional roller transport system to accommodate both roll and sheet film.

Features of the 3000 RA Processor include microprocessor control, an operator interface, error detection and indicators, and “smart” replenishment. The 3000 RA Processor also provides 4 operator-selectable film processing cycles, which run at 4 default transport speeds. The 4 cycles are:

- K/RA
- Rapid
- Standard
- Extended

Each cycle has default parameters for transport speed, developer and fixer replenishment volumes, and for developer, fixer, and Dryer temperatures. These default parameters are stored in memory, but can be modified by the operator.

All cycles, except for the K/RA cycle, use standard RP chemicals and film. The K/RA cycle requires RA chemicals and film.

Identifying the Covers and Panels and Other Components of the Processor

Figure 1 **Receive End of the Processor**

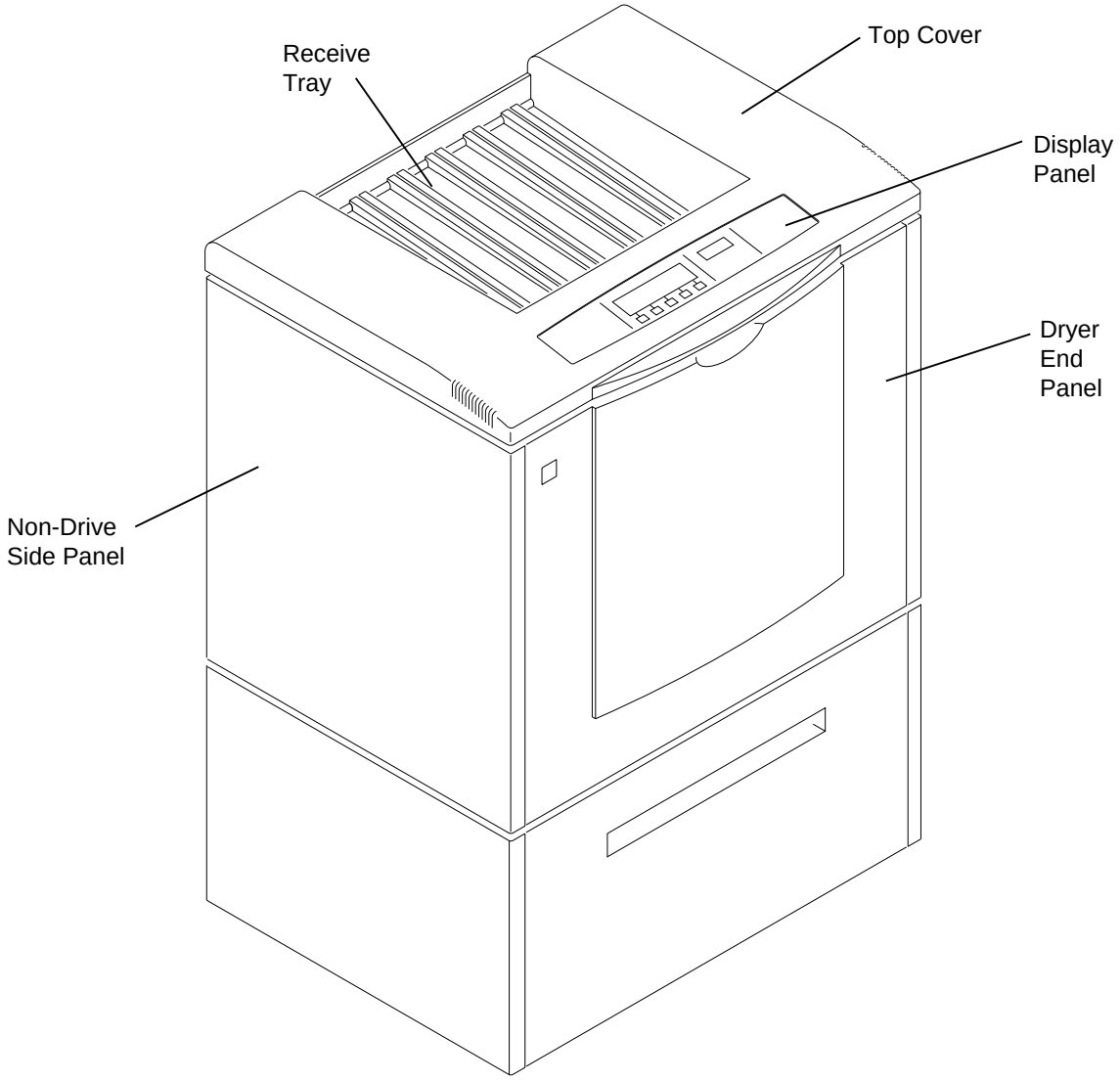

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Figure 2 **Feed End of the Processor**

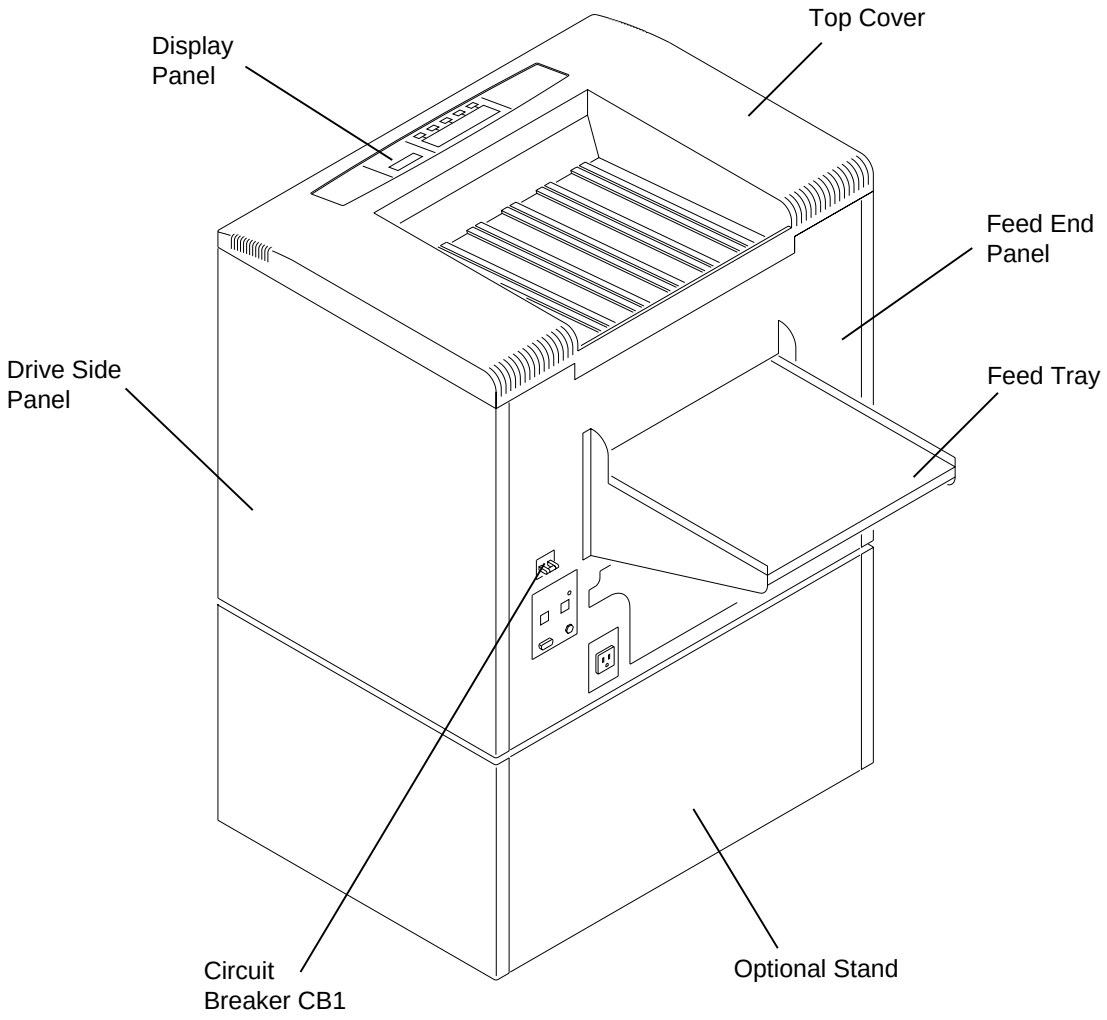

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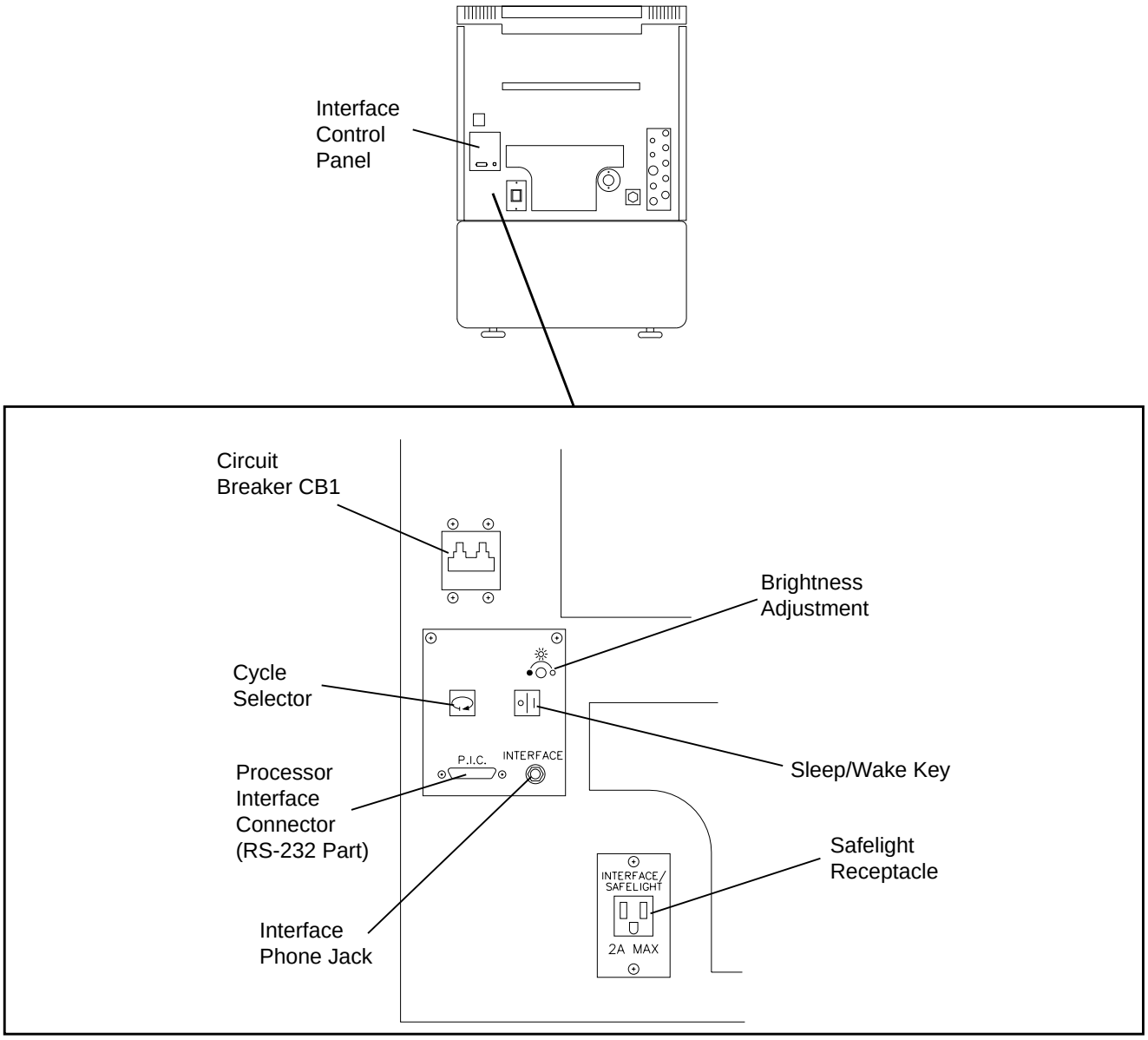
Figure 3 **Circuit Breaker, Safelight Receptacle, and Interface Control Panel**



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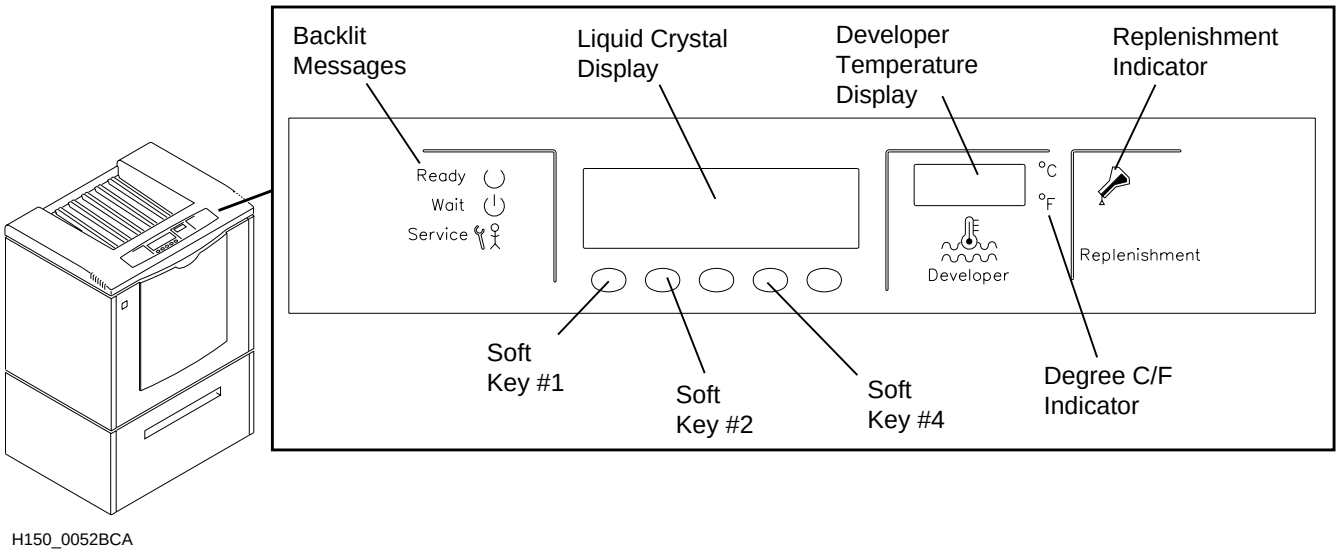
Using the Display Panel

The operator can select, change, and monitor processing variables for the *Kodak X-Omat* 3000 RA Processor, using the Display Panel. See the figure below.

Figure 4 **Display Panel**



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The Display Panel provides the following status information of the Processor:

- Ready, Wait, and Service Status Indicators
- Status/Error Messages
- Current cycle
- Current function for each of the Soft Keys
- Developer Temperature °C or °F Indicator, which provides the current temperature of the developer in the Processor Tank
- Replenishment Indicator, which illuminates when both Replenishment Pumps are operating

Explanation of Status Indicators

The 3 Status Indicators provide the following information:

- If the Green “Ready” Indicator is illuminated, the Processor is ready to accept film.
- If the Yellow “Wait” Indicator is illuminated, the Processor has not yet reached optimum film processing conditions.
- If the Red “Service” Indicator is illuminated, the Processor is in need of service.

A second set of Status Indicators, located on the feed end of the Processor, operate in the same way as the Status Indicators on the Display Panel. Located below the Status Indicators on the feed end of the Processor, is a second row of Indicators which indicate the current film processing cycle.

Indicator Illuminated	Operating Cycle Selected
K	K/RA
R	Rapid
S	Standard
E	Extended

The Display Panel also has 5 keys called “Soft Keys.” These keys allow you to select, change, and monitor Processor variables. These keys are located just below the message area of the Display Panel.

				CURRENT CYCLE
MESSAGE				
SOFT KEY 1	SOFT KEY 2	SOFT KEY 3	SOFT KEY 4	SOFT KEY 5

After you press a key to make a selection from the menus displayed, the functions of the first 4 keys change to the next lower level of menu selections. Keys that are not used in a particular menu level remain blank. Pressing the fifth key, “DONE/RETURN,” executes the function and causes the previous menu level to be displayed.

Several characteristics of the Soft Keys to be aware of are:

1. All screens that allow you to change data or the configuration of the Processor display a “DONE/RETURN” key, which allows you to return to the previous screen.
2. All options that allow you to change data, configuration, or affect the functionality of the Processor take effect immediately after you release the key even if you do not press the DONE/RETURN key.
3. To modify numerical values, use the up and down arrow keys. Each time you press either the up or down arrow key, the value will change by one unit. To scroll through an entire range of values quickly, simply press and hold either the up or down arrow key.

Adjusting the Contrast of the Display Panel

The Room Light Sensor disables the backlight on the Display Panel when the room is dark or if the Sensor is covered by something such as papers or your hand. Whenever the backlight of the Display Panel is off, the 5 Soft Keys are disabled to prevent you from making any inadvertent changes.

[1] To lighten the display, press and hold Soft Key 4 on the Display Panel. At the same time, press Soft Key 2 on the Display Panel to obtain the desired contrast.

[2] To darken the display, press and hold Soft Key 4 on the Display Panel. At the same time, press Soft Key 1 on the Display Panel to obtain the desired contrast.

Adjusting the Intensity of the Interface Control Panel

The Light Intensity Adjustment Control allows you to change the brightness of the Indicators located on the feed end of the Processor. If the room is brightly lit, no adjustment is available; the Indicators illuminate at full intensity. When the room is dark or dimly lit, you can adjust the intensity by rotating the Adjustment Control.

[1] To brighten the intensity of the Indicators, rotate the Adjustment Control clockwise ↷.

[2] To dim the intensity of the Indicators, rotate the Adjustment Control counterclockwise ↶.

Using the Access Code

Only service personnel and one primary person should have use of the access code. The default access code **4213** is required to perform certain functions.

Simply press the "GO TO SETUP" key on the Walk-Up Menu and enter the access code to perform the functions listed below:

- to change setup information preset at the factory
- to change to or from the "K/RA" cycle

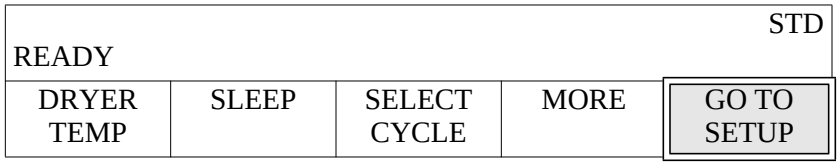
If the Limited Access Feature is off, an access code is **not** necessary to perform the functions listed below:

- to select the Processor cycle (except "K/RA")
- to change the Dryer temperature
- to display the current fixer temperature
- to place the Processor in Sleep Mode
- to display the time and date

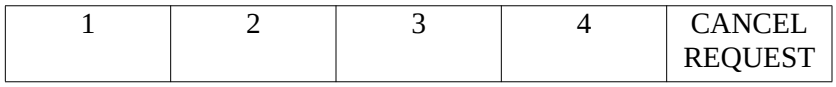
The access code can be changed at any time by the user. To change the access code, follow the procedure below. If you forget the new access code and need to revert back to the original access code, call your service provider.

Changing the Access Code

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.



[2] Enter the 4-digit access code.

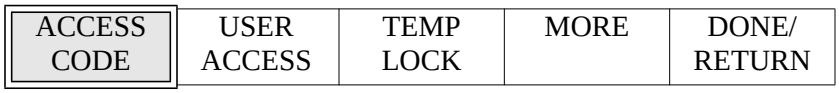


[3] Press the "MORE" key.

[4] Press the "OPTIONS" key.

[5] Press the "MORE" key.

[6] Press the "ACCESS CODE" key.



[7] Enter the 4 digits of the new access code.

1	2	3	4	CANCEL REQUEST

[8] Enter the same new 4-digit access code. A message will appear stating whether the new access code has been accepted.

[9] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Note

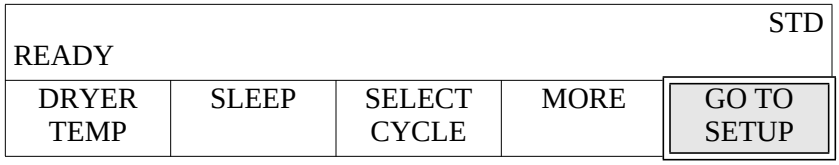
If you forget the new access code and need to revert to the original access code, call your service provider.

Limiting Access to the Processor Setup

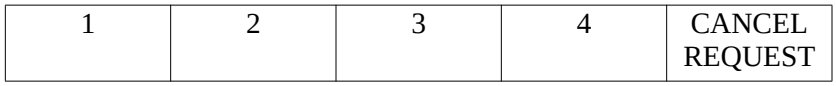
Enabling the Limit Access feature prevents users from adjusting the Dryer temperature or changing the processing cycle without first entering the access code. When this feature is selected, only those operators who know the correct access code have the ability to change the dryer temperature or change the processing cycle. While this feature is selected, the Cycle Change Switch on the feed end of the Processor remains inactive.

Changing the User Access

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.



[2] Enter the 4-digit access code.

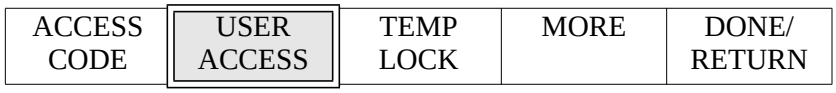


[3] Press the "MORE" key.

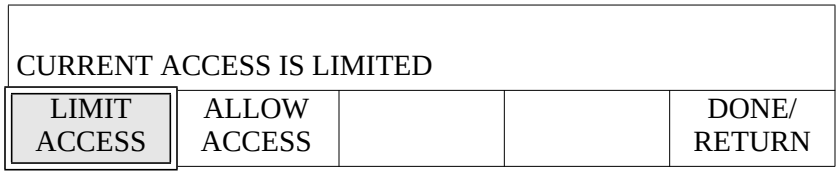
[4] Press the "OPTIONS" key.

[5] Press the "MORE" key.

[6] Press the "USER ACCESS" key.



[7] Press the "LIMIT ACCESS" key.



[8] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

Operating Characteristics

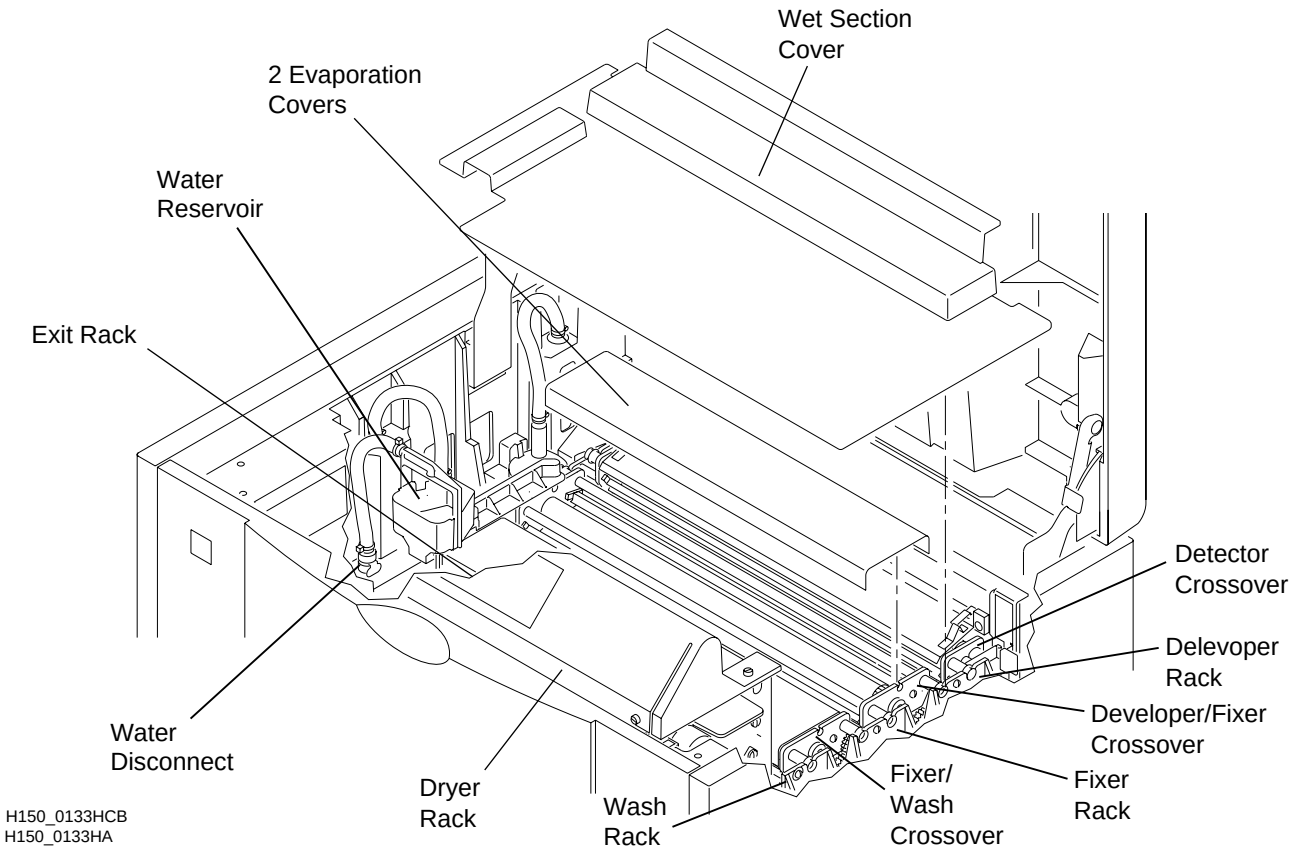
- All menus appearing **before** the point you are required to enter the access code give you only **20 seconds** to press a key. If you do not press a key within that time, the Walk-Up Menu will appear.
- All menus appearing **after** the point you are required to enter the access code give you **2 minutes** to press a key. If you do not press a key within that time, the Walk-Up Menu will appear.
- When you first turn on the Processor, the wash water and Drive Motor run for 4 minutes and then turn off. The Replenishment Pumps also turn on briefly.
- If either the developer or fixer solution evaporated while the Processor was off, the developer and fixer tanks will be automatically replenished to their overflow levels when you turn on the Processor.
- When film is fed, the Drive Motor and the Dryer Blower turn on immediately, and the water turns on as soon as the first film reaches the Fixer/Wash Crossover.
- The Drive Motor will not operate if the Top Cover of the Processor is open.
- In an area that is dark or dimly lit, the room light Sensors on the Processor will detect the lack of bright light and turn off the illuminated messages on the Display Panel to prevent the fogging of the film which it “thinks” is being processed. The Soft Keys are also disabled if you use the Processor in an area that is dark or dimly lit. If you would like the menu options and messages that appear on the Display Panel to remain illuminated when the Processor is operating in a dark or dimly lit room, contact your qualified service provider.
- All errors and warnings cause the alarm on the Processor to sound twice when a film is fed into the Film Detector.

Performing the Daily Start-Up Procedure

Note

You can also program the Processor to turn on automatically by setting the Automatic On Timer. See Page 52 for the procedure on how to program the Automatic Timers.

Figure 5 **Checking the Positions of the Components**



[1] Check that the Racks and Crossovers are in their correct positions.

[2] Check that the Water Reservoir is in position.

[3] Check that the 2 Crossover Troughs (not shown) are on the bottom of the Developer/Fixer and Fixer/Wash Crossovers.

[4] Check that the Water Line is connected.

[5] Check that developer and fixer solutions are near the overflow levels of each Tank.

[6] Install the Evaporation Covers and the Wet Section Cover if they are not already installed.

[7] Close the Top Cover of the Processor.

Important

The incoming water temperature should be between 4 and 29°C (40 and 85°F).

[8] Turn on the water supply.

[9] Remove any film from the Feed Tray.

[10] Move the wall power switch to the “ON” position.

[11] Move the main Circuit Breaker CB1 to the “|” position.

[12] For optimum processing quality, allow approximately 20 minutes for the processing solutions to reach the correct operating temperature before you feed film. The Ready Indicator will illuminate once the solutions have reached the correct temperature.

Performing the Shutdown Procedure

Note

You can also program the Processor to shut down automatically by setting the Automatic Off Timer. See Page 52 for the procedure on how to set the Automatic Timers.

[1] Move the main Circuit Breaker CB1 to the “O” position.

[2] Move the wall power switch to the “OFF” position.

[3] Turn off the water supply.

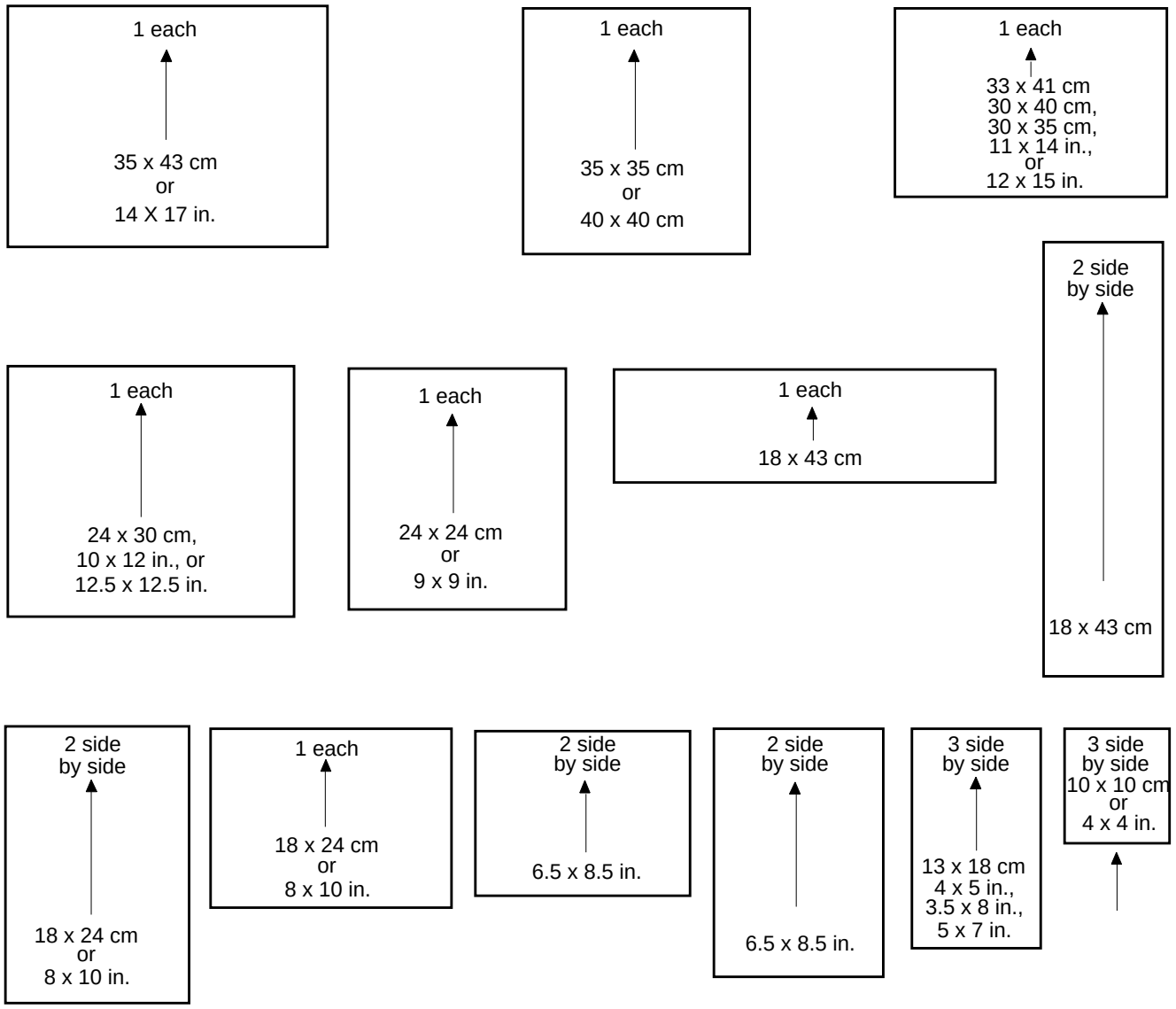
Film Feeding

Sheet Film: See the figure for the recommended film-insertion procedure. Arrows indicate the direction in which films should be fed into the Processor. Choose either the right or left edge of the Feed Tray, and always feed films **square** with that edge of the Feed Tray.

Caution

- Feeding multiple films simultaneously will produce a film log error.
- Align films with either the right or left edge of the Feed Tray.
- Feed all single emulsion films, with the emulsion side up.
- **Do not** pull back films after you feed them into the Processor.
- **Do not** pull on film as it exits the Processor.
- **Do not** allow more than 80 sheets of films to accumulate in the Receive Tray at one time.

Figure 6 **X-Ray Film Sizes**



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Roll Film: Use a sheet of film as a Leader. Make sure that the sheet film is as wide as, or wider than, the roll film and at least 18 cm (7 in.) long.

Using 2.5 cm (1 in.) wide tape, such as **3M SCOTCH** Brand Polyester Film Tape No. 850, fasten the roll film, emulsion side up, to the Leader, making sure that the adhesive side of the tape is not exposed. Most other types of tape are not acceptable, because their bases are soluble in the processing solutions.

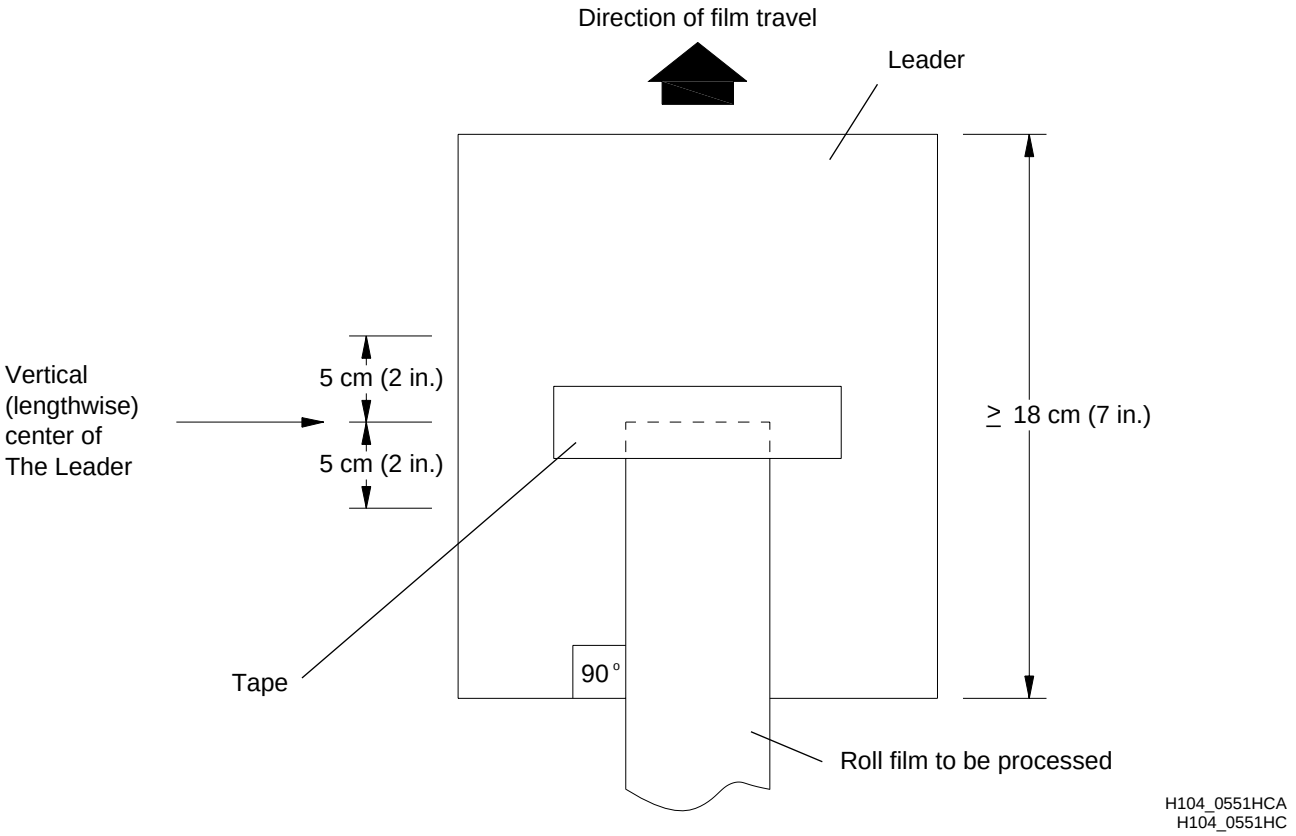
Note

Tape the leading edge of the roll film, **emulsion side up,** within 5.1 cm (2 in.) of the vertical (lengthwise) center of the Leader. See the figure.

Important

For reliable transport of the roll film, apply slight tension on both the feed and take-up ends of the roll film, such as with a *Kodak* Roll Film Take-Up, Model 11.

Figure 7 **Attaching a Leader to Roll Film**



Default Setpoints and Configurations

Section 1: Summary of Default Settings

Setup information consists of the process setpoints and the film Processor configurations. All setup information that was preset at the factory is listed in the tables below.

Setup information is stored in battery backed-up RAM (Random Access Memory). Therefore, you do not need to program new values every time that you turn on the Processor. **Even if power to the Processor is interrupted or the Processor is turned off, you do not need to program the Processor.**

If you wish, you may change the setup information by using the Soft Keys on the Display Panel. See the following pages for instructions on how to set up the Processor.

Table 1 Default Processor Configurations for All Cycles

Access Code	4-2-1-3
Processing Cycle	*Standard
Dryer Temperature	*43°C (110°F)
Time and Date	Operator Must Enter
Pump Calibration	Operator Must Complete
Alarm Volume	Mid Range (7)
Replenishment Mode	Automatic
Temperature Lockout Mode	Disabled
Display Units	°F, in./min
Receptacle Mode	Safelight Mode
Standby Mode	Interval
Display Language	English
Access to Processor Setup	Allowed
Sleep Mode Options Roller Jog Cool Down	 Off Off
Automatic On and Off Timers	Off

*Operator Must Ensure That Setting is Correct for the Application.

Table 2 Default Processor Setpoints for Each Cycle

Item	K/RA (USA)	K/RA (Outside USA)	RAPID	STANDARD	EXTENDED
Developer Temperature	35.6°C (96°F)	33.3°C (92°F)	37.2°C (99°F)	34.4°C (94°F)	34.4°C (94°F)
Fixer Temperature (minimum)	32.2°C (90°F)	35°C (95°F)	35°C (95°F)	32.2°C (90°F)	29.4°C (85°F)
Developer Replenishment Volume (35 x 43 cm sheet)					
Automatic	60 mL	60 mL	60 mL	60 mL	60 mL
Flooded	65 mL	65 mL	65 mL	65 mL	65 mL
Fixer Replenishment Volume (35 x 43 cm sheet)					
Automatic	85 mL	85 mL	85 mL	85 mL	85 mL
Flooded	65 mL	65 mL	65 mL	65 mL	65 mL
Transport Speed	193.0 cm/min (76 in./min)	144.3 cm/min (57 in./min)	144.8 cm/min (57 in./min)	106.7 cm/min (42 in./min)	53.3 cm/min (21 in./min)
Dryer Temperature	43°C (110°F)	43°C (110°F)	43°C (110°F)	43°C (110°F)	43°C (110°F)

Section 2: Basic Setup Options

Selecting a Film Processing Cycle

Description:

The 3000 RA Processor offers 4 cycles to process film in the Processor: Extended, Standard, Rapid, and K/RA. You may select the Extended, Standard, or Rapid cycle in either of 2 ways: by using the Cycle Change Key or by using the Display Panel. The Cycle Change Key is located on the feed end of the Processor. The Display Panel also provides you with a convenient means of selecting a cycle. Selecting the Extended, Standard, or Rapid cycle does not require the use of the access code. The Kwik (K/RA) cycle, which provides the fastest film processing time, is only available through the Display Panel and does require use of the access code.

After you select a cycle, the microprocessor automatically adjusts the transport speed, replenishment volumes, and solution temperatures to the programmed values for the selected cycle. When changing from one cycle to another, you do, however, need to set the Dryer temperature to the lowest setting that still provides good drying. See the procedure for setting the Dryer temperature on Page 25.

Table 3 Cycle Information for the Processor

Cycle	Process Time	Drop Time	Film and Chemicals	Throughput films/hour
Kwik (K/RA) USA	52 seconds	63 seconds	RA Film and Chemicals	270
Kwik (K/RA) Outside USA	69 seconds	83 seconds	RA Film and Chemicals	201
Rapid	69 seconds	83 seconds	RA or RP Film, RP Chemicals	201
Standard	93 seconds	112 seconds	RA or RP Film, RP Chemicals	148
Extended	183 seconds	222 seconds	RP Film and Chemicals	74

Cycle as used in this table, refers to the film processing cycle that is currently selected.

Process Time refers to the time it takes the **leading edge** of a 35 x 43 cm (14 x 17 in.) sheet of film to travel from the Detector Rollers to the Exit Rollers of the Dryer Rack.

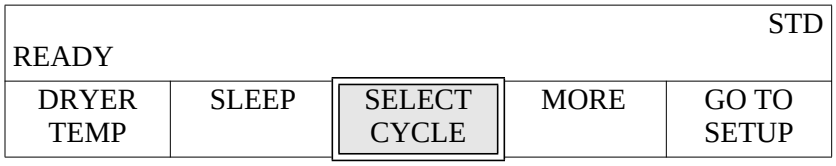
Drop Time refers to the time from the **leading edge** of a 35 x 43 cm (14 x 17 in.) sheet of film fed 43 cm wide entering the Detector Rollers until the **trailing edge** exits the Dryer Rack.

Film and Chemicals refer to the combination of film and chemicals required for optimum image quality when using the Processor. *Kodak* RP *X-Omat* Developer Replenisher and *Kodak* RP *X-Omat* Fixer and Replenisher, or equivalents, may be used with the Extended, Standard, and Rapid cycles. **Only *Kodak* RA *X-Omat*** Films and Chemicals may be used for the K/RA cycle. Contact your Kodak representative to discuss the best option for your needs.

Throughput refers to the number of 35 x 43 cm (14 x 17 in.) sheets of film fed 43 cm wide that can be processed in one hour.

Procedure for Selecting a Cycle Other Than K/RA:

[1] From the Walk-Up Menu, press the “SELECT CYCLE” key.

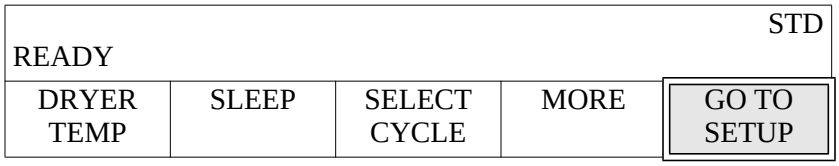


[2] Press the appropriate key for the desired cycle.

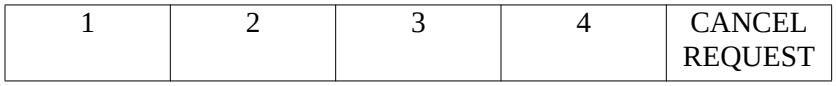
[3] Press the “DONE/RETURN” key repeatedly until you return to the Walk-Up Menu.

Procedure for Selecting the K/RA Cycle:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.



[2] Enter the 4-digit access code.



[3] Press the “CYCLE” key.

[4] Press the “K/RA CYCLE” key.

[5] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

Selecting the K/RA Cycle Setpoint Defaults

Description:

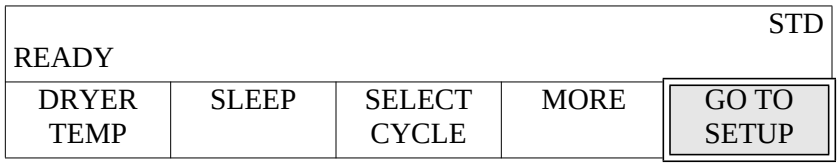
The Processor has 3 possible default cycle options. See Pages 21 and 22 for the setpoint defaults.

- U.S.
- Europe
- Japan

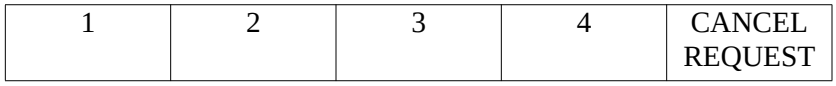
Default Setting: U.S.

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.



[2] Enter the 4-digit access code.

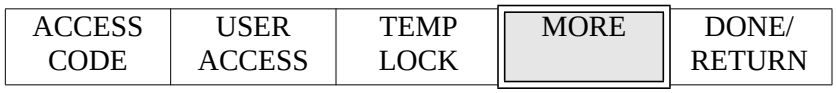


[3] Press the “MORE” key.

[4] Press the “OPTIONS” key.

[5] Press the “MORE” key.

[6] Press the “MORE” key.



[7] Press the “MORE” key.

[8] Press the “CYCLE DEFAULT” key.

RECPT MODE	ALARM VOLUME	CYCLE DEFAULT	MORE	DONE/ RETURN

[9] Press the appropriate key.

U.S.	EUROPE	JAPAN		DONE/ RETURN

[10] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Setting the Dryer Setpoint Temperature

Description:

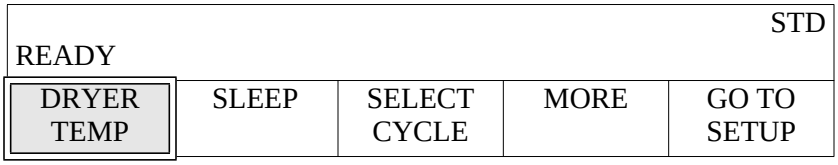
When selecting a Dryer temperature, always select the lowest temperature that still provides good film drying. Films exiting the Processor should be “just dry” and cool to the touch in order to prevent artifacts. You will find it necessary to adjust the Dryer temperature whenever you change the film processing cycle and possibly when you change the type of film you are processing. You may choose to have the Dryer temperature reading displayed in either metric units (degrees Celsius) or English units (degrees Fahrenheit). To select the display units, see the procedure on Page 40.

Default Setting: 43°C (110°F)

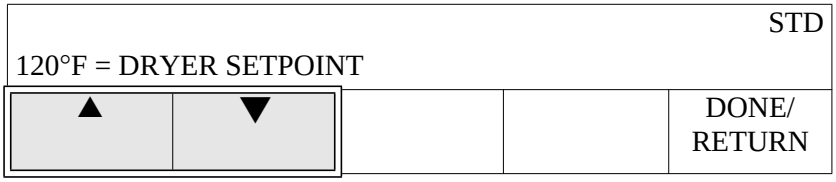
Accepted Range: 21 - 66°C (70 - 150°F)

Procedure:

[1] From the Walk-Up Menu, press the “DRYER TEMP” key.



[2] Use the up and down arrow keys to select the desired Dryer temperature.



[3] Press the “DONE/RETURN” key repeatedly until you return to the Walk-Up Menu.

Setting the Time and Date

Description:

By setting the Clock in the Processor, you can take advantage of several of the features that the Processor offers:

- Auto Start-Up and Shutdown
- Time and Date Stamping of Error Messages

When setting the time and date, you may choose from several different formats:

Time Formats:

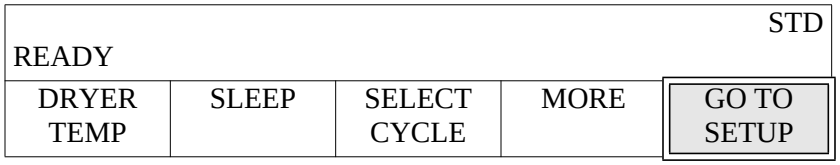
- 12 Hour
- 24 Hour

Date Formats (where M=Month, D=Day, and Y=Year):

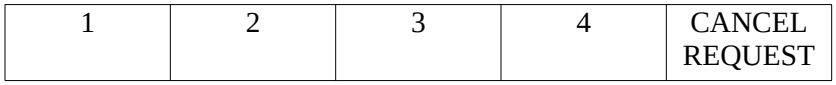
- M-D-Y
- D-M-Y
- Y-M-D

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.



[2] Enter the 4-digit access code.



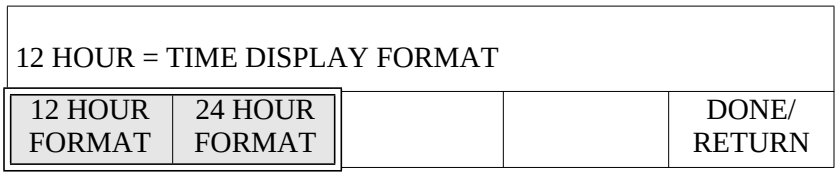
[3] Press the “MORE” key.

[4] Press the “SETUP” key.

[5] Press the “CLOCK” key.

[6] Press the “TIME FORMAT” key.

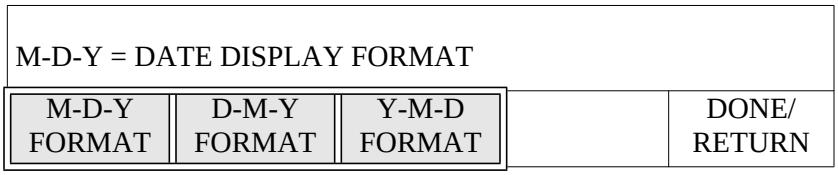
[7] Select the “FORMAT” key of your choice.



[8] Press the “DONE/RETURN” key **once** to return to the format options.

[9] Press the “DATE FORMAT” key.

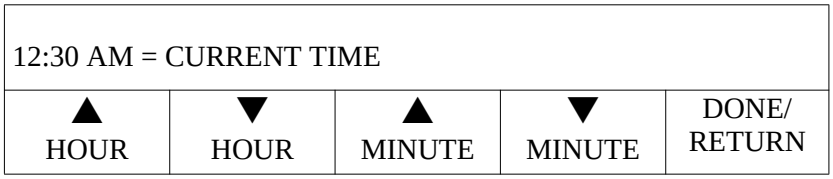
[10] Select the “FORMAT” key of your choice.



[11] Press the “DONE/RETURN” key **once** to return to the set time and set date options.

[12] Press the “SET TIME” key.

[13] Use the up and down arrow keys to set the time in hours and minutes.

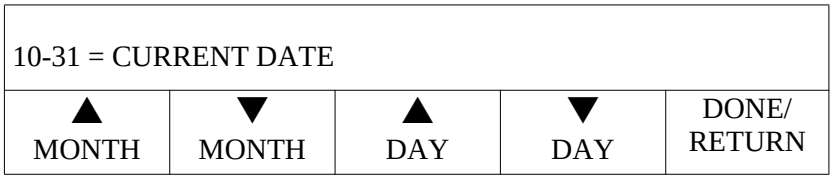


[14] Press the “DONE/RETURN” key **once** to return to the set date option.

[15] Press the “SET DATE” key.

[16] Press the “SET DATE” key.

[17] Use the up and down arrow keys to set the date.



[18] Press the “DONE/RETURN” key **once** to return to the set year option.

[19] Press the “SET YEAR” key.

SET DATE	SET YEAR			DONE/ RETURN

[20] Use the up and down arrow keys to set the year.

1995 = CURRENT YEAR				
▲ YEAR	▼ YEAR			DONE/ RETURN

[21] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

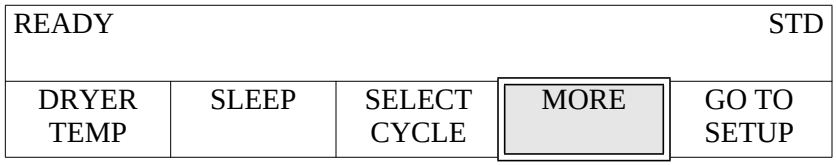
Displaying the Time and Date

Description:

If you wish to display the current time and date, simply press the “TIME/DATE” key on the Display Panel. The current time and date will then appear on the Display Panel.

Procedure:

[1] From the Walk-Up Menu, press the “MORE” key.



[2] Press the “TIME/DATE” key.

[3] Press the “DONE/RETURN” key repeatedly until you return to the Walk-Up Menu.

Calibrating the Replenishment System

Description:

Calibrate the replenishment system every 3 months.

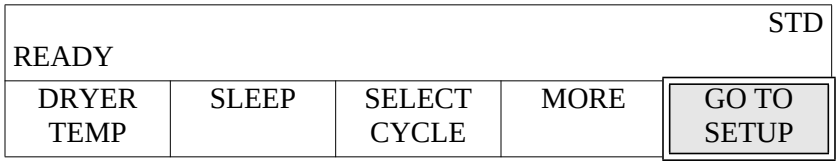
Calibrating the replenishment system determines the actual rate of the processing solution flowing through the Replenishment Pumps. To calibrate the Pump you need to first measure the volume of solution pumped during a set time period, and secondly enter the information into the microprocessor by using the procedure outlined below. The microprocessor then computes the flow rate of the solution through the Pump and adjusts the length of time that the Pump must operate so that the volume of replenishment delivered equals the replenishment volume selected.

Important

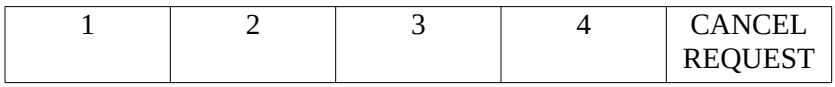
The volume of replenishment solution actually measured during this procedure is **not** the **volume delivered** for a 35 x 43 cm sheet of film.

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.



[2] Enter the 4-digit access code.



[3] Press the “MORE” key.

[4] Press the “SETUP” key.

[5] Press the “PUMP CALIB” key.

[6] Press the “DEV CAL” key to calibrate the Developer Pump or the “FIX CAL” key to calibrate the Fixer Pump.

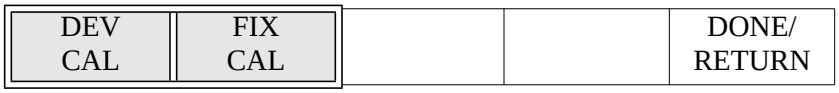
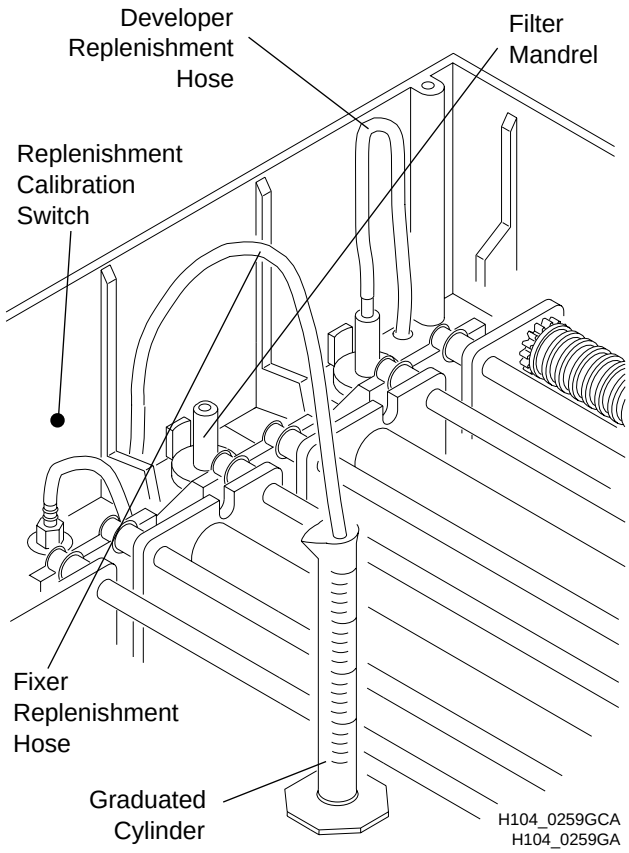


Figure 8 **Measuring the Replenishment Volume**



Caution

Wear protective eyewear when executing the following procedure. Replenishment solutions are pumped quickly and may splash.

[7] Open the Top Cover of the Processor.

[8] Insert the end of the Developer Replenishment (or Fixer Replenishment) Hose into a Graduated Cylinder.

[9] Hold the Graduated Cylinder over the wash section of the Processor so that spills will not contaminate the processing solutions.

[10] Press the Replenishment Calibration Switch on the side wall of the Processor Tank.

[11] Measure and record the volume of replenishment delivered by the system.

[12] Dispose of the solution in the Graduated Cylinder.

[13] Do Steps 8 through 11 at least 2 more times.

[14] Determine the average volume of replenishment delivered.

[15] Install the Replenishment Hose into the developer (or fixer) Filter Mandrel.

[16] Close the Top Cover of the Processor.

[17] Press the “UPDATE CAL VOL” key.

UPDATE CAL VOL				DONE/ RETURN

[18] Use the up and down arrow keys to increase or decrease the volume displayed on the screen until the volume displayed matches the average volume of replenishment as determined in Step 14.

60 mL = MEASURED DEVELOPER VOLUME				
▲	▼			DONE/ RETURN

[19] Press the “DONE/RETURN” key repeatedly to return to the menu shown below.

DEV CAL	FIX CAL			DONE/ RETURN

[20] Repeat Steps 6 through 18 to calibrate the fixer (or developer) replenishment.

[21] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Selecting a Replenishment Mode

Description:

Automatic Replenishment Mode

Select this mode when you want the Processor to automatically adjust the replenishment volumes for developer and fixer according to film usage. See the procedure "Setting the Developer and Fixer Replenishment Volume" beginning on Page 48.

Flooded Replenishment Mode

Select this mode if your site has low film usage of less than 25 sheets of 35 x 43 cm (14 x 17 in.) film or equivalent area per 8-hour day. **Check with your Kodak representative** to see whether the Flooded Replenishment Mode is right for the film usage of the Processor. Replenishment will be added automatically —

- every 5 minutes, achieving a minimum replenishment of 780 mL/hr while the Processor is on **and**
- when the equivalent film area of 35 x 43 cm (14 x 17 in.) has been processed.

Tank Fill Mode

Select this mode to fill empty Processor Tanks automatically. A warning error stating that the "Tanks Currently Being Filled" occurs as the Tanks are filling. After the Tanks are filled, the error is cleared and the Processor will begin normal operation.

Disable Replenishment

Select this feature to disable the Replenishment Pumps before doing any of the cleaning procedures. When the Pumps are disabled, a warning error stating that the "Replenishment Pumps Disabled" occurs. To clear the error, simply select either Automatic or Flooded Replenishment.

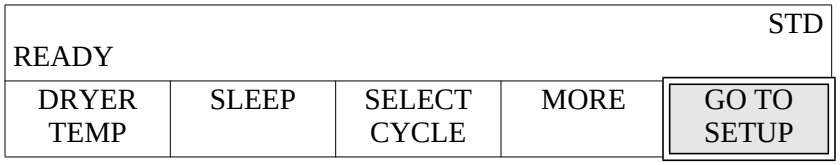
Default Setting: Automatic

Procedure:

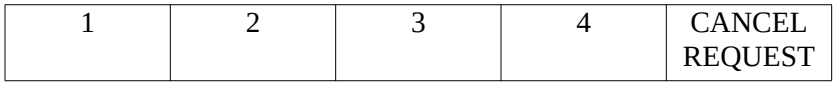
[1] Press the "GO TO SETUP" key.

Note

The "SELECT CYCLE" key does not appear if you have selected the K/RA cycle.



[2] Enter the 4-digit access code.



[3] Press the "MORE" key.

[4] Press the "OPTIONS" key.

[5] Press the “REPLEN MODE” key.

REPLEN MODE	DAILY STARTUP	DISPLAY UNITS	MORE	DONE/ RETURN

[6] Select one of the 4 replenishment modes:

- Automatic Replenishment
- Flooded Replenishment
- Tank Fill
- Disable Replenishment

REPLENISHMENT MODE IS AUTO				
AUTO	FLOODED	TANK FILL	DISABLE REPLEN	DONE/ RETURN

[7] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Selecting the Standby Mode

Description:

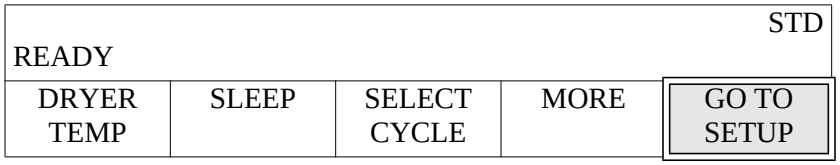
The Processor will enter the Standby mode if no films are fed for approximately 15 seconds. There are 2 modes within the Standby mode — the Interval mode and the Continuous mode. With the Processor in the Interval mode, the transport system and wash water turn on periodically to keep the Rollers wet. When the Processor is in the Continuous mode, the transport system will operate continuously at a reduced speed to keep the Rollers wet. In either mode, the following actions take place:

- the Dryer Blower and Heater turn on as needed to maintain the temperature of the Dryer
- the wash water turns on every 36½ minutes to clean the Rollers
- the solution Heaters remain on as needed to maintain the setpoint temperature of the solutions

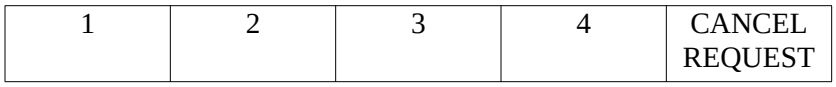
Default Setting: Interval

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.



[2] Enter the 4-digit access code.

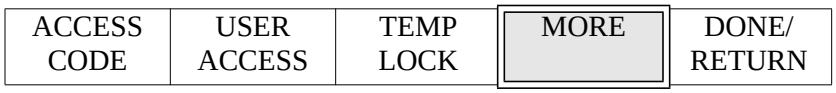


[3] Press the "MORE" key.

[4] Press the "OPTIONS" key.

[5] Press the "MORE" key.

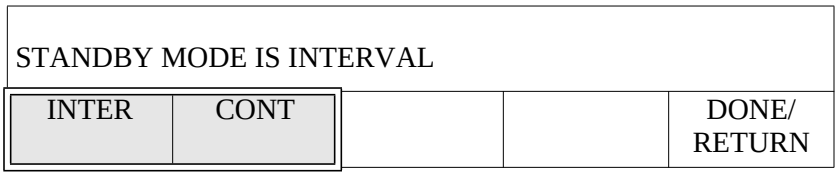
[6] Press the "MORE" key.



[7] Press the "STANDBY MODE" key.

[8] Press either key:

- the “INTER” key for the Interval Mode
- the “CONT” key for Continuous Mode



[9] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

Setting the Volume of the Alarm

Description:

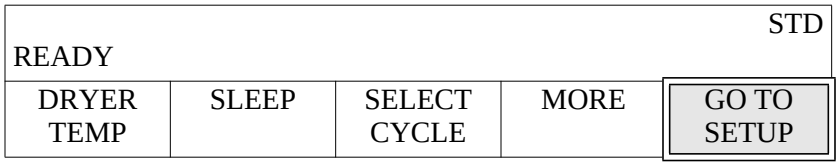
The Processor includes an audible alarm that signals the user when to feed films in order to ensure the proper spacing of films. The alarm also signals the occurrence of an error or warning. The volume of the alarm is adjustable among 15 different levels. As you increase or decrease the volume of the alarm, the alarm sounds continuously so that you can hear the current volume level you selected. The alarm continues to sound until you press the "DONE/RETURN" key or until the screen time-out expires.

Default Setting: Mid Range (7)

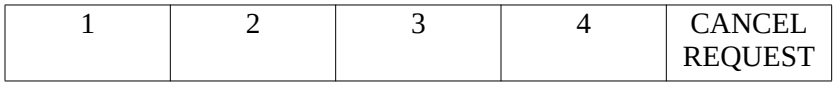
Accepted Range: 0 - 15

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.



[2] Enter the 4-digit access code.

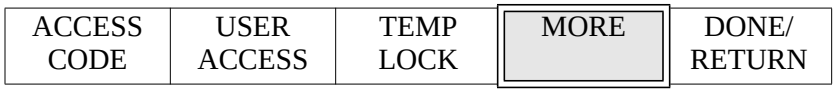


[3] Press the "MORE" key.

[4] Press the "OPTIONS" key.

[5] Press the "MORE" key.

[6] Press the "MORE" key.

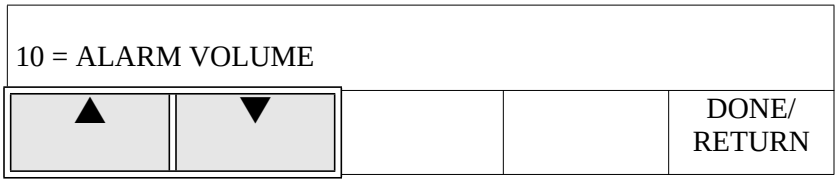


[7] Press the "MORE" key.

[8] Press the "ALARM VOLUME" key.

[9] To change the volume of the alarm, press the appropriate key:

- "▲" key **to increase** the volume
- "▼" key **to decrease** the volume



[10] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

Selecting Temperature Lockout Mode

Description:

Turning Temperature Lockout ON automatically disables the transport system whenever the developer temperature deviates from the specified temperature range. The transport system remains disabled until the temperature of the developer is back within the specified temperature tolerance of ± 0.3°C (0.5°F) of the setpoint.

Turning temperature Lockout OFF allows the Processor to accept film even when the developer temperature deviates from the specified temperature range.

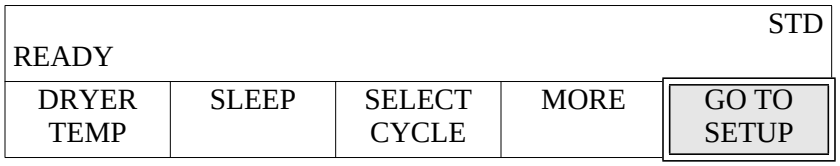
Default Setting: Off

Important

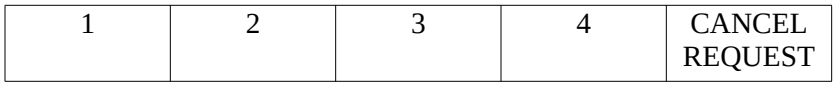
When using accessory equipment, the "Temperature Lockout" must be "OFF" to prevent the accessory equipment from attempting to feed films with the transport off.

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.



[2] Enter the 4-digit access code.

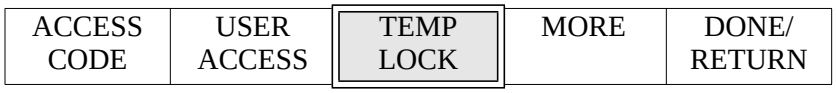


[3] Press the "MORE" key.

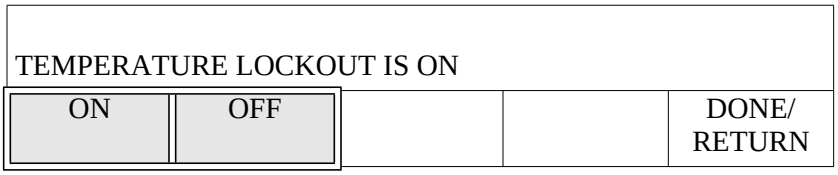
[4] Press the "OPTIONS" key.

[5] Press the "MORE" key.

[6] Press the "TEMP LOCK" key.



[7] Press the "ON or OFF" key.



[8] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

Selecting Display Units for Temperature and Transport Speed

Description:

The software of the Processor allows you to choose either degrees Fahrenheit (°F) or degrees Celsius (°C) for temperature units, and either English (in./min) or metric (cm/min) units for transport speed.

Default Setting: English °F and in./min

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.

READY				STD
DRYER TEMP	SLEEP	SELECT CYCLE	MORE	GO TO SETUP

[2] Enter the 4-digit access code.

1	2	3	4	CANCEL REQUEST

[3] Press the "MORE" key.

▲	▼	CYCLE	MORE	DONE/ RETURN

[4] Press the "OPTIONS" key.

INFO	SETUP	OPTIONS		DONE/ RETURN

[5] Press the "DISPLAY UNITS" key.

REPLEN MODE	DAILY SETUP	DISPLAY UNITS	MORE	DONE/ RETURN

[6] Press either key:

- "ENGLISH" for °F and in./min or
- "METRIC" for °C and cm/min

UNITS ARE ENGLISH				
ENGLISH	METRIC			DONE/ RETURN

[7] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Selecting the Receptacle Mode

Description:

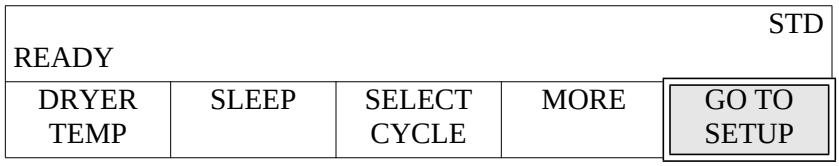
The Safelight Receptacle, which is located on the Feed End Panel (see Figure 3 on Page 8) can be set to one of two modes:

- Safelight - receptacle power is on except when film is in the entrance area of the Processor. Power is again returned after the trail edge of film has traveled 3 in. beyond the Film Accumulator.
- Accessory - receptacle power is always on.

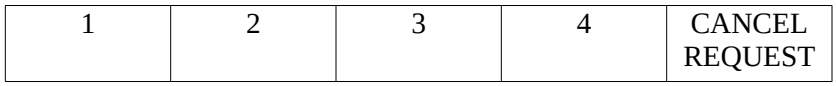
Default Setting: Safelight Mode

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.



[2] Enter the 4-digit access code.

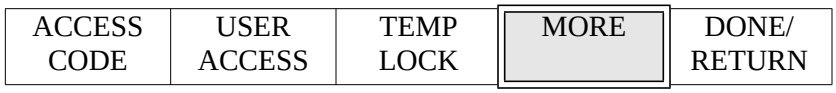


[3] Press the “MORE” key.

[4] Press the “OPTIONS” key.

[5] Press the “MORE” key.

[6] Press the “MORE” key.



[7] Press the “MORE” key.

[8] Press the “RECEPT MODE” key.

[9] Press either key:

- "SAFE" key for the Safelight mode or
- "ACCY" key for the Accessory mode

RECEPTACLE MODE IS SAFELIGHT				
SAFE	ACCY			DONE/ RETURN

[10] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Selecting the Display Language

Description:

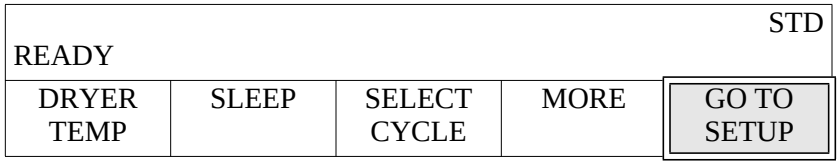
The Processor displays messages in 12 different languages:

Danish	Italian
Dutch	Japanese
English	Norwegian
Finnish	Portuguese
French	Spanish
German	Swedish

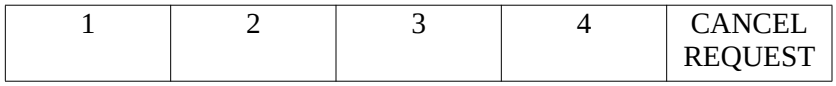
Default Setting: English

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.



[2] Enter the 4-digit access code.

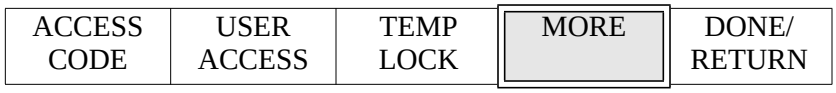


[3] Press the “MORE” key.

[4] Press the “OPTIONS” key.

[5] Press the “MORE” key.

[6] Press the “MORE” key.



[7] Press the “MORE” key.

[8] Press the “MORE” key.

RECPT MODE	ALARM VOLUME	CYCLE DEFAULT	MORE	DONE/ RETURN

[9] Press the “LANG” key.

LANG			MORE	DONE/ RETURN

[10] Press the appropriate key to select the display language.

LANGUAGE IS ENGLISH				
ENGLISH	FRENCH	GERMAN	MORE	DONE/ RETURN
SPANISH	SWEDISH	NORWEG	MORE	DONE/ RETURN
DANISH	DUTCH	ITALIAN	MORE	DONE/ RETURN
PORTU	FINNISH	JAPAN	MORE	DONE/ RETURN

[11] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Section 3: Advanced Setup Options

Setting the Developer and Fixer Setpoint Temperatures

Description:

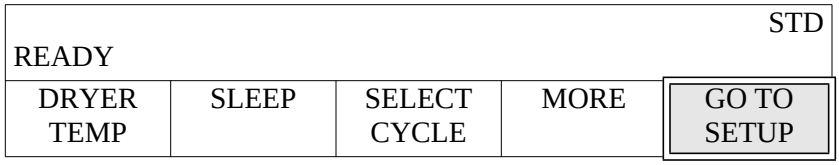
Developer and fixer setpoint temperatures can be modified and stored for future use. Setpoints that were preset at the factory always can be restored by pressing the "DEFAULT SETTING" key in Step 9.

Default Developer Setting: Varies with Cycle Selected

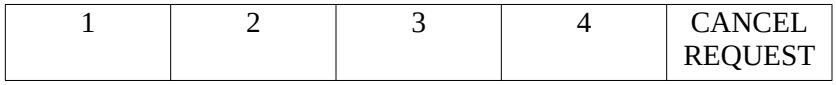
Default Fixer Setting: Varies with Cycle Selected

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.



[2] Enter the 4-digit access code.



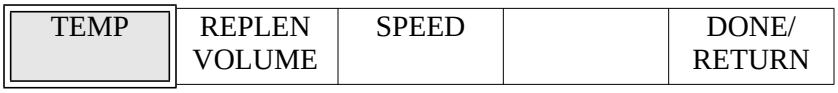
[3] Press the "MORE" key.

[4] Press the "SETUP" key.

[5] Press the "PROCESS" key.

[6] Press the key for the current film processing cycle.

[7] Press the "TEMP" key.



[8] Press either key:

- the "DEV TEMP" key to change the developer setpoint temperature
- the "FIX TEMP" key to change the fixer setpoint temperature

[9] To change the setpoint temperature, press the appropriate key:

- "▲" key **to increase** the setpoint temperature
- "▼" key **to decrease** the setpoint temperature
- "DEFAULT SETTING" key to return to the default setpoint temperature
- "CANCEL REQUEST" key to cancel the procedure

95.0° = DEVELOPER SETPOINT				
▲	▼	DEFAULT SETTING	CANCEL REQUEST	DONE/ RETURN

[10] Do Steps 8 and 9 for the fixer (or the developer) solution.

[11] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Note

The setpoint temperature for the fixer solution is a minimum only; the temperature may rise above this setpoint.

Displaying the Fixer Temperature

Description:

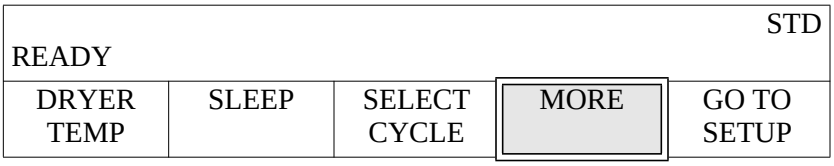
If you wish to determine the temperature of the fixer solution, simply press the “DISPLAY FIX TEMP” key on the Display Panel. The temperature reading will then be displayed for the fixer solution.

Note

The setpoint temperature for the fixer solution is a minimum only; the temperature may rise above this setpoint.

Procedure:

[1] From the Walk-Up Menu, press the “MORE” key.



[2] Press the “DISPLAY FIX TEMP” key.

[3] Press the “DONE/RETURN” key repeatedly until you return to the Walk-Up Menu.

Setting the Developer and Fixer Replenishment Volumes

Description:

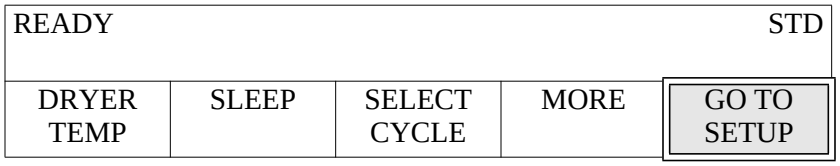
Default Developer Setting: Varies with Type of Replenishment Selected

Default Fixer Setting: Varies with Type of Replenishment Selected

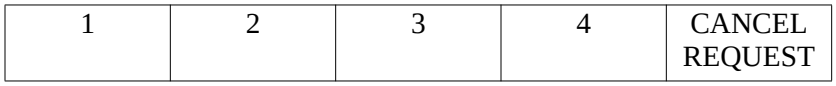
If it is necessary to change the replenishment volumes from the factory default settings, follow the procedure outlined below.

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

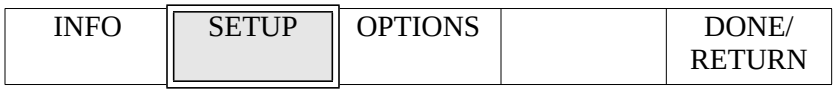


[2] Enter the 4-digit access code.



[3] Press the “MORE” key.

[4] Press the “SETUP” key.

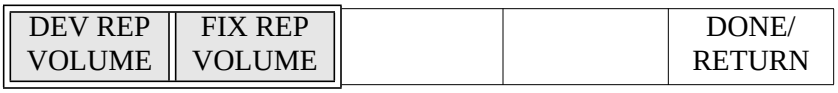


[5] Press the “PROCESS” key.

[6] Press the appropriate “CYCLE” key.

[7] Press the “REPLEN VOLUME” key.

[8] Press the “DEV or FIX REP VOLUME” key.



[9] Press the appropriate key to change the replenishment volume:

- "▲" key **to increase** the volume
- "▼" key **to decrease** the volume
- "DEFAULT SETTING" key to return to the default volume
- "CANCEL REQUEST" key to cancel the procedure

60 mL = FIXER REPLENISHMENT VOLUME				
▲	▼	DEFAULT SETTING	CANCEL REQUEST	DONE/ RETURN

[10] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Verifying the Replenishment Rates

[1] Open the Top Cover of the Processor.

[2] Insert the end of the Developer (or Fixer) Replenishment Hose into a Graduated Cylinder.

[3] Hold the Graduated Cylinder over the wash section of the Processor so that spills will not contaminate the processing solutions.

[4] Press and hold for 5 seconds the Replenishment Calibration Switch located on the side wall of the Processor Tank.

[5] Allow the Replenishment Pumps to turn on and deliver the preset volume of replenishment solution.

[6] Compare the volume of replenishment solution delivered into the Graduated Cylinder to the replenishment volume you set in the previous procedure. If the 2 volumes are not within 10% of each other, do the "Calibrating the Replenishment System" procedure on Page 30.

Setting the Transport Speed

Description:

Default Setting: Varies with Cycle Selected

Accepted Range: Varies with Cycle Selected

If it is necessary to change the default setting, follow the procedure outlined below.

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

READY				STD
DRYER TEMP	SLEEP	SELECT CYCLE	MORE	**GO TO SETUP**

[2] Enter the 4-digit access code.

1	2	3	4	CANCEL REQUEST

[3] Press the “MORE” key.

▲	▼	CYCLE	**MORE**	DONE/ RETURN

[4] Press the “SETUP” key.

INFO	**SETUP**	OPTIONS		DONE/ RETURN

[5] Press the “PROCESS” key.

PROCESS	CLOCK	AUTO STARTUP	PUMP CALIB	DONE/ RETURN

[6] Press the appropriate “CYCLE” key.

RAPID CYCLE	STD CYCLE	EXTD CYCLE	K/RA CYCLE	DONE/ RETURN

[7] Press the “SPEED” key.

TEMP	REPLEN VOLUME	**SPEED**		DONE/ RETURN

[8] Press the appropriate key to change the transport speed:

- "▲" key **to increase** the speed
- "▼" key **to decrease** the speed
- "DEFAULT SETTING" key to return to the default speed
- "CANCEL REQUEST" key to cancel the procedure

45 IN/MIN = SPEED SETPOINT				
▲	▼	DEFAULT SETTING	CANCEL REQUEST	DONE/ RETURN

[9] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Setting the Automatic On and Off Timers

Description:

The Processor software provides you programmable timers so that you may program 2 distinct on and off times for the Processor each day. The Automatic Timers allow you to specify a start time for the Processor to energize automatically so that the processing solutions and the Dryer will have reached their setpoint temperatures before you arrive at the work site. The Processor can store up to 2 "start times" and 2 "off times" for each day of the week to coincide with changing shifts or with weekend schedules.

Example of Use: For instance, if you would like the Processor to be warmed up and ready to accept films by the time you arrive at work in the morning, you may set Timer1 to turn on the Processor at 6:00 a.m. If you operate during 2 distinct shifts and there is a large lapse in time between the 2 shifts, you might want to set Timer1 to turn off the Processor at the end of the first shift. You might then want to set Timer2 to turn on the Processor again an hour before the second shift starts for the afternoon. And finally, you might want to set Timer2 to turn off the Processor for the night at the end of the second shift.

Important

Do not set the On and Off Timers within 15 minutes of each other. To ensure the correct operation of the Processor, the Processor must remain on for at least 15 minutes before the Automatic Off Timer turns it off. Likewise, the Processor must remain off for at least 15 minutes before the Automatic On Timer turns it on.

Procedure for Setting Timer1 Initially:

Note

If the Timers are already set and you wish to change the on and off times, follow the procedure on Page 56.

Before proceeding with the steps below, be sure that you have completed the procedure for setting the time and date on Page 26.

If you are reading through the steps below to become familiar with the procedure and are not actually setting the timers, the screens that you see displayed may be different from the sample screens shown in this procedure.

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.

READY				STD
DRYER TEMP	SLEEP	SELECT CYCLE	MORE	GO TO SETUP

[2] Enter the 4-digit access code.

1	2	3	4	CANCEL REQUEST

[3] Press the "MORE" key.

▲	▼	CYCLE	MORE	DONE/ RETURN

[4] Press the "SETUP" key.

INFO	SETUP	OPTIONS		DONE/ RETURN

[5] Press the “AUTO STARTUP” key.

PROCESS	CLOCK	AUTO STARTUP	PUMP CALIB	DONE/ RETURN

[6] If you have already set the clock, continue with Step 7. If you have not yet set the time and date, the display below will appear. Do the procedure on Page 26 before continuing with this procedure.

CLOCK MUST BE SET BEFORE CONTINUING				
				DONE/ RETURN

[7] Press the “ON” key.

AUTO STARTUP IS OFF				
	ON	OFF		DONE/ RETURN

[8] Press the “SET TIMERS” key.

AUTO STARTUP IS ON				
SET TIMERS	ON	OFF		DONE/ RETURN

Setting the On Time

[9] Press the“TIMER1 CONTROL” key.

PRESS BUTTON TO SET UP FOR MONDAY				
TIMER1 CONTROL		COPY PREV	NEXT DAY	DONE/ RETURN

[10] Press the “ON” key.

SET UP TIMER1 FOR MONDAY				
		ON	OFF	DONE/ RETURN

[11] Press the “ON TIME” key.

SET UP TIMER1 FOR MONDAY				
ON TIME		ON	OFF	DONE/ RETURN

[12] Use the up and down arrow keys to select the hour and minute when you want the Processor to turn on.

6:00 AM = CURRENT ON TIME				
▲ HOUR	▼ HOUR	▲ MINUTE	▼ MINUTE	DONE/ RETURN

[13] Press the "DONE/RETURN" key to return to the menu options shown below.

SET UP TIMER1 FOR MONDAY				
ON TIME	OFF TIME	ON	OFF	DONE/ RETURN

Setting the Off Time

Note

Any time the screen shown below appears on the Display Panel, you can press the "OFF" key to erase the last programmed on and off times for Timer1 and Timer2.

[14] Press the "OFF TIME" key.

SET UP TIMER1 FOR MONDAY				
ON TIME	OFF TIME	ON	OFF	DONE/ RETURN

[15] Use the up and down arrow keys to select the hour and minute when you want the Processor to turn off.

11:00 AM = CURRENT OFF TIME				
▲ HOUR	▼ HOUR	▲ MINUTE	▼ MINUTE	DONE/ RETURN

[16] Press the "DONE/RETURN" key repeatedly until you return to the menu options shown below.

PRESS BUTTON TO SET UP FOR MONDAY				
TIMER1 CONTROL	TIMER2 CONTROL	COPY PREV	NEXT DAY	DONE/ RETURN

Procedure for Setting Timer2 Initially

[1] Press the "TIMER2 CONTROL" key.

PRESS BUTTON TO SET UP FOR MONDAY				
TIMER1 CONTROL	TIMER2 CONTROL	COPY PREV	NEXT DAY	DONE/ RETURN

[2] Repeat Steps 10 through 16 starting on Page 53 to set the on and off times for Timer2. Then set the on and off times for the remaining days of the week by completing the steps on the next page.

Procedure for Setting the On and Off Timers for the Remaining Days of the Week

If the hours that you would like to operate the Processor on the other days of the week are the same hours as those you set for Monday, follow Steps 1 through 3 below.

If you do not want to repeat Monday's on and off times for the other days of the week, follow Steps 4 through 13 on Page 55.

Copying On and Off Timer Settings

[1] Press the "NEXT DAY" key to advance the display to show Tuesday.

PRESS BUTTON TO SET UP FOR MONDAY				
TIMER1 CONTROL	TIMER2 CONTROL	COPY PREV	**NEXT DAY**	DONE/ RETURN

[2] Press the "COPY PREV" key. You will hear a beep when you press the "COPY PREV" key. If you would like to ensure that Monday's on and off times were repeated for the next day, do the steps below.

PRESS BUTTON TO SET UP FOR TUESDAY				
TIMER1 CONTROL		**COPY PREV**	NEXT DAY	DONE/ RETURN

[3] Repeat the entire process to set the Automatic Timers for the remaining days of the week.

Setting Different On and Off Times for the Remaining Days

If you want to select different on and off times for Timer1 and Timer2 than those you set for Monday, do the steps below.

[4] Press the "NEXT DAY" key to advance the display to show Tuesday.

PRESS BUTTON TO SET UP FOR MONDAY				
TIMER1 CONTROL		COPY PREV	**NEXT DAY**	DONE/ RETURN

[5] Press the "TIMER1 CONTROL" key.

PRESS BUTTON TO SET UP FOR TUESDAY				
TIMER1 CONTROL		COPY PREV	NEXT DAY	DONE/ RETURN

[6] Press the "ON" key to enable Timer1.

SET UP TIMER1 FOR MONDAY				
		ON	OFF	DONE/ RETURN

[7] Press the "ON TIME" key.

SET UP TIMER1 FOR TUESDAY				
ON TIME		ON	OFF	DONE/ RETURN

[8] Use the up and down arrow keys to select the hour and minute when you want the Processor to turn on.

2:00 PM = CURRENT ON TIME				
▲ HOUR	▼ HOUR	▲ MINUTE	▼ MINUTE	DONE/ RETURN

[9] Press the “DONE/RETURN” key until you return to the menu options shown below. Press the “OFF TIME” key.

SET UP TIMER1 FOR TUESDAY				
ON TIME	OFF TIME	ON	OFF	DONE/ RETURN

[10] Use the up and down arrow keys to select the hour and minute when you want the Processor to turn off.

11:00 PM = CURRENT OFF TIME				
▲ HOUR	▼ HOUR	▲ MINUTE	▼ MINUTE	DONE/ RETURN

[11] Press the “DONE/RETURN” key twice to return to the menu options displayed below. Press the “TIMER2 CONTROL” key.

PRESS BUTTON TO SET UP FOR TUESDAY				
TIMER1 CONTROL	TIMER2 CONTROL	COPY PREV	NEXT DAY	DONE/ RETURN

[12] Repeat Steps 7 through 11 to set the on and off time settings for Timer2.

[13] Repeat the entire process to set the Automatic Timers for the remaining days of the week.

Changing the On and Off Timer Settings

Note

If you are setting the On and Off Timer Settings for the very first time, follow the procedure on Page 52.

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

STD READY				
DRYER TEMP	SLEEP	SELECT CYCLE	MORE	GO TO SETUP

[2] Enter the 4-digit access code.

1	2	3	4	CANCEL REQUEST

[3] Press the “MORE” key.

▲	▼	CYCLE	MORE	DONE/ RETURN

[4] Press the “SETUP” key.

INFO	SETUP	OPTIONS		DONE/ RETURN

[5] Press the “AUTO STARTUP” key.

PROCESS	CLOCK	AUTO STARTUP	PUMP CALIB	DONE/ RETURN

[6] Press the “SET TIMERS” key.

AUTO STARTUP IS ON				
SET TIMERS	ON	OFF		DONE/ RETURN

[7] Press either the “TIMER1 CONTROL” or “TIMER2 CONTROL” key.

PRESS BUTTON TO SET UP FOR MONDAY				
TIMER1 CONTROL	TIMER2 CONTROL	COPY PREV	NEXT DAY	DONE/ RETURN

[8] Press either the “ON TIME” or the “OFF TIME” key.

SET UP TIMER1 FOR MONDAY				
ON TIME	OFF TIME	ON	OFF	DONE/ RETURN

[9] Use the up and down arrow keys to select the new time that you want to program.

6:00 AM = CURRENT ON TIME				
▲ HOUR	▼ HOUR	▲ MINUTE	▼ MINUTE	DONE/ RETURN

[10] Continue changing the programmed on and off times for Timer1 and Timer2 by pressing the “DONE/ RETURN” key repeatedly until you return to the appropriate menu.

SET UP TIMER1 FOR MONDAY				
ON TIME	OFF TIME	ON	OFF	DONE/ RETURN

Note

Any time the screen shown above appears on the Display Panel, you can press the “OFF” key to erase the last programmed on and off times for Timer1 and Timer2.

[11] When you are through changing the on and off times, press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

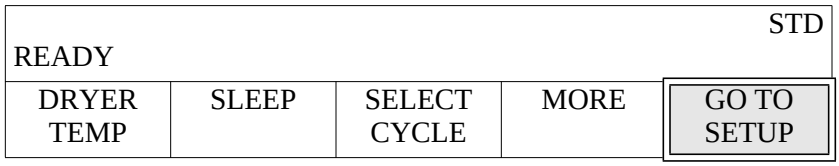
Selecting the Start-Up Option

Description:

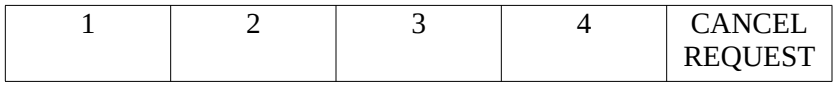
Selecting the Daily Start-Up option allows you to temporarily disable the Automatic Start-Up feature of Sleep Mode. This feature provides you with a convenient, easy way to leave the Processor in Sleep Mode for several days without needing to re-program the daily on and off timers.

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.



[2] Enter the 4-digit access code.

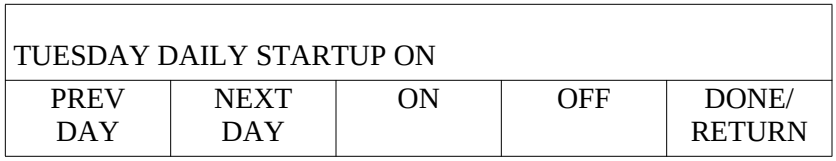


[3] Press the "MORE" key.

[4] Press the "OPTIONS" key.

[5] Press the "DAILY STARTUP" key.

[6] Press the appropriate keys to select the day for which you wish to turn on or turn off the Automatic Start-Up feature.



[7] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

Entering and Exiting Sleep Mode

Description:

When the Processor is in Sleep Mode, the Processor appears to be “off,” but the microprocessor remains active. Depending upon the configuration of other options, the components listed below remain off while the Processor is in Sleep Mode:

- Heaters
- Motors
- Solenoids

While the Processor is in Sleep Mode, you cannot feed films or access any of the Processor setup screens.

You can manually place the Processor in or out of Sleep Mode in either of 2 ways:

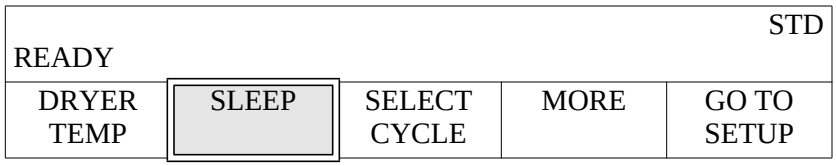
1. You may simply use the “Sleep/Wake” key located on the feed end of the Processor.
2. Or, you may use the Soft Keys on the Display Panel to place the Processor into or out of Sleep Mode.

Procedure for Entering Sleep Mode:

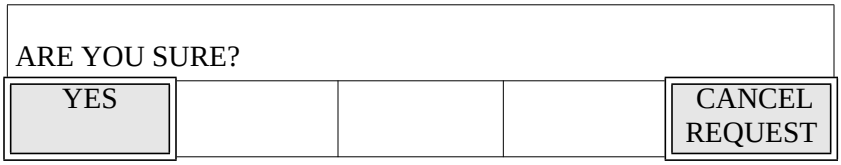
Note

When the Processor is in Sleep Mode, the backlight for the Display Panel is off. Press any key to illuminate the Display Panel.

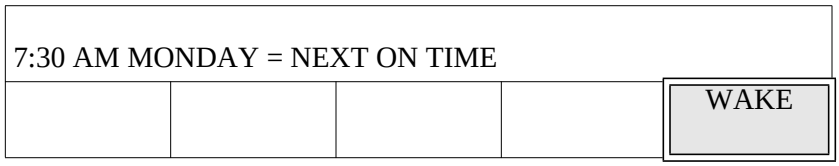
[1] From the Walk-Up Menu, press the “Sleep” key.



[2] Press the “YES” key to place the Processor in Sleep Mode or the “CANCEL REQUEST” key to quit.



[3] If you have programmed the Automatic On and Off Timers under the “AUTO STARTUP” menu, the screen below will be displayed when the Processor enters Sleep Mode. The screen remains displayed until the Automatic Timer turns on or until you press the “WAKE” key.

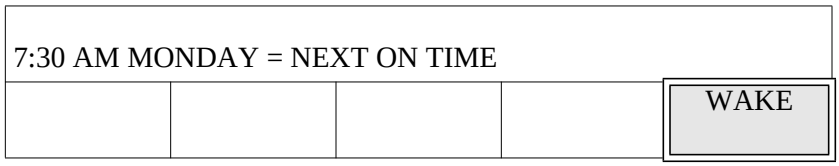


If you have not programmed the Automatic On and Off Timers, the Processor will display the message “PROCESSOR IN SLEEP MODE.”

Procedure for Exiting Sleep Mode:

There are 3 different ways to take the Processor out of Sleep Mode:

[1] If you have programmed the Automatic On and Off Start-Up Timers, you can allow the pre-programmed On Timer to return the Processor to normal operating condition at the specified time.



[2] Press the “WAKE” key on the Display Panel.

[3] Press the “SLEEP/WAKE” key on the feed end of the Processor.

Selecting Sleep Mode Options

Description:

You can choose how the Sleep Mode feature operates by selecting or not selecting the **Roller Jog** and the **Cool Down** options and by setting the values of the On and Off Timers for the **Auto Start-Up** option.

The selection of the **Roller Jog** feature reduces chemical buildup on the Rack and Crossover Rollers. When the Roller Jog feature is selected, the transport Motor and wash water activate periodically supplying the Crossover Troughs with water. Therefore, it is recommended that you select the Roller Jog option when operating the Processor in Sleep Mode.

The selection of the **Cool Down** feature prevents the condensation of processing solutions. When you select the Cool Down feature, the Dryer Blower operates for 3 hours to exhaust the moist, warm air from the Processor. Therefore, the Cool Down feature, like the Roller Jog feature, reduces the buildup of chemicals on the Rack and Crossover Rollers. It is recommended that you also select the Cool Down option when operating the Processor in Sleep Mode.

Default Settings: Roller Jog - Off
Cool Down - Off

Procedure for Turning On or Off the Roller Jog Option:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.

READY				STD
DRYER TEMP	SLEEP	SELECT CYCLE	MORE	GO TO SETUP

[2] Enter the 4-digit access code.

1	2	3	4	CANCEL REQUEST

[3] Press the "MORE" key.

▲	▼	CYCLE	MORE	DONE/ RETURN

[4] Press the "OPTIONS" key.

INFO	SETUP	OPTIONS		DONE/ RETURN

[5] Press the "MORE" key.

REPLEN MODE	DAILY STARTUP	DISPLAY UNITS	MORE	DONE/ RETURN

[6] Press the "MORE" key.

ACCESS CODE	USER ACCESS	TEMP LOCK	MORE	DONE/ RETURN

[7] Press the “ROLLER JOG” key.

STANDBY MODE	ROLLER JOG	COOL DOWN	MORE	DONE/ RETURN

[8] Press either key:

- the “ON” key to enable the Roller Jog option
- the “OFF” key to disable the Roller Jog option

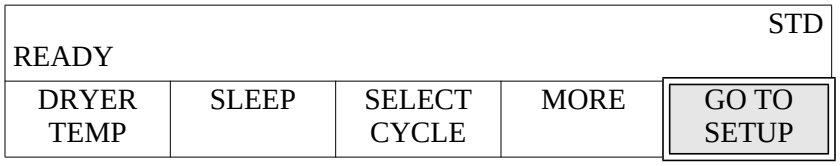
ON	OFF			DONE/ RETURN

[9] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

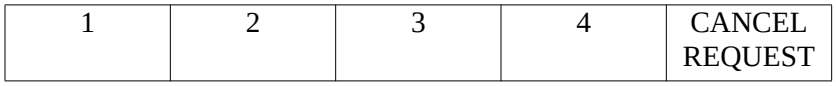
EXIT SETUP?				
YES				CANCEL REQUEST

Procedure for Turning On or Off the Cool Down Option:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.



[2] Enter the 4-digit access code.

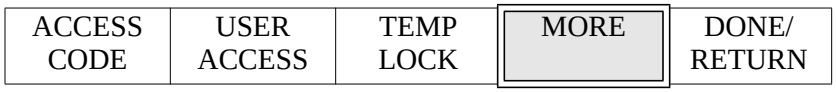


[3] Press the “MORE” key.

[4] Press the “OPTIONS” key.

[5] Press the “MORE” key.

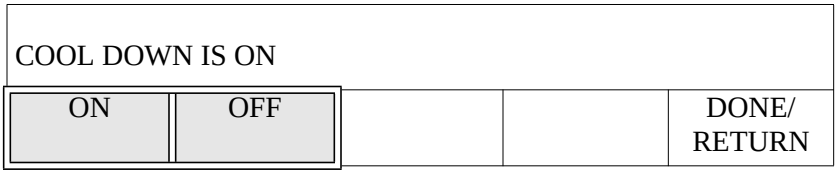
[6] Press the “MORE” key.



[7] Press the “COOL DOWN” key.

[8] Press either key:

- the “ON” key to enable the Cool Down option
- the “OFF” key to disable the Cool Down option



[9] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

Usage Information

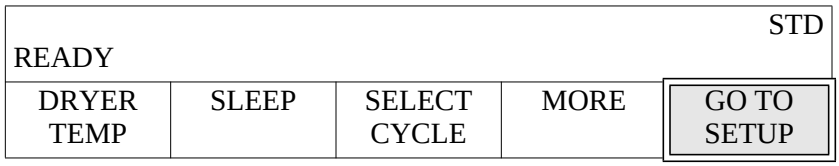
Obtaining the Developer Usage Volume

Description:

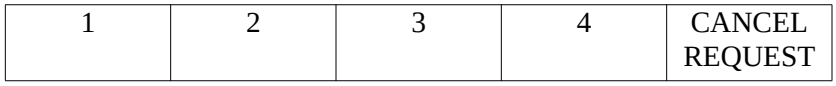
This procedure provides you with the total volume of developer used to fill the Processing Tank and to replenish the developer since the screen was last reset.

---

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

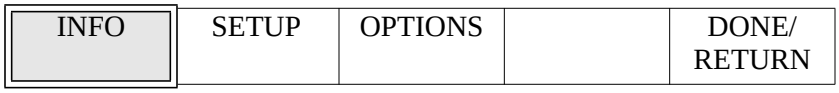


[2] Enter the 4-digit access code.



[3] Press the “MORE” key.

[4] Press the “INFO” key.



[5] Press the “USAGE” key.

[6] Press the “DEV USAGE” key. The current volume of developer used and the date that the accumulation began will appear on the Display Screen.

To clear the developer usage information, do the steps below.

[7] Press the “CLEAR USAGE” key to clear both the total volume usage and the usage rate.

[8] When prompted, “ARE YOU SURE?” press the appropriate key:

- the “YES” key to clear the developer usage information and reset it to zero.
- the “CANCEL REQUEST” to continue recording the developer usage volume without resetting the volume to zero.

[9] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

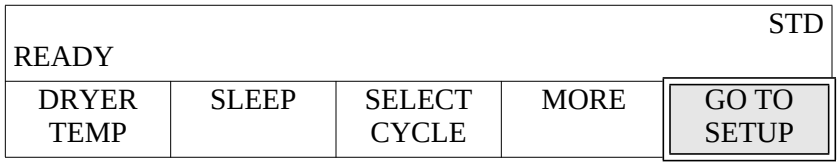
Obtaining the Developer Usage Rate

Description:

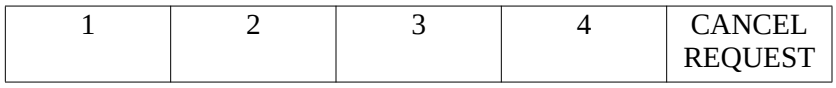
This procedure provides you with the average volume of developer used to replenish a single sheet of film processed.

---

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

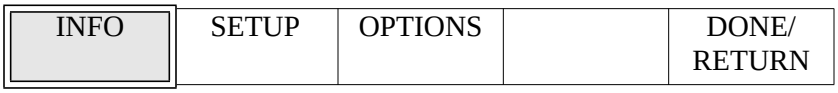


[2] Enter the 4-digit access code.



[3] Press the “MORE” key.

[4] Press the “INFO” key.



[5] Press the “USAGE” key.

[6] Press the “DEV USAGE” key.

[7] Press the “USAGE RATE” key. The average volume of developer replenishment used per single sheet of film processed will appear on the Display Screen.

To clear the developer rate information, do the steps below.

[8] Press the “CLEAR USAGE” key to clear both the total volume usage and the usage rate.

[9] When prompted, “ARE YOU SURE?” press the appropriate key:

- the “YES” key to clear the developer usage information and reset it to zero.
- the “CANCEL REQUEST” to continue recording the developer usage volume without resetting the volume to zero.

[10] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

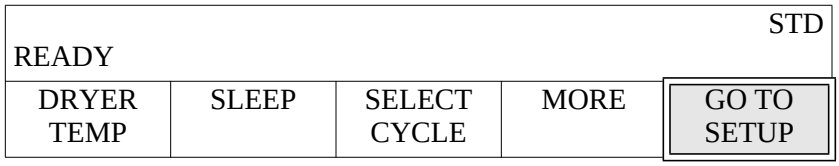
Obtaining the Fixer Usage Volume

Description:

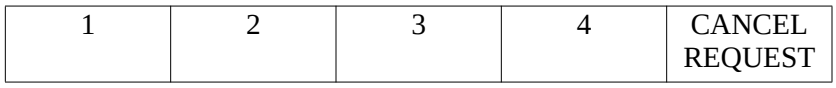
This procedure provides you with the total volume of fixer used to fill the Processing Tank and to replenish the fixer since the counter was last reset.

---

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

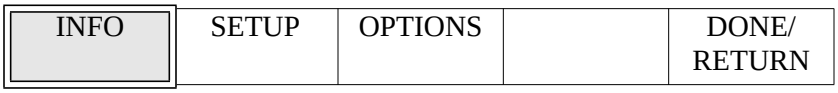


[2] Enter the 4-digit access code.



[3] Press the “MORE” key.

[4] Press the “INFO” key.

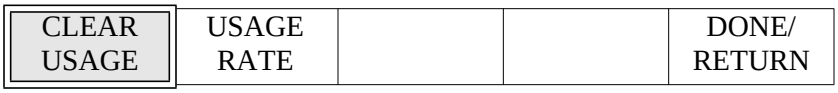


[5] Press the “USAGE” key.

[6] Press the “FIXER USAGE” key. The current volume of fixer used and the date that the accumulation began will appear on the Display Screen.

To clear the fixer usage information, do the steps below.

[7] Press the “CLEAR USAGE” key to clear both the total volume usage and the usage rate.



[8] When prompted, “ARE YOU SURE?” press the appropriate key:

- the “YES” key to clear the fixer usage information and reset it to zero.
- the “CANCEL REQUEST” to continue recording the fixer usage volume without resetting the volume to zero.

[9] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

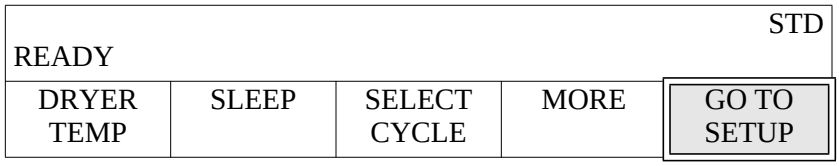
Obtaining the Fixer Usage Rate

Description:

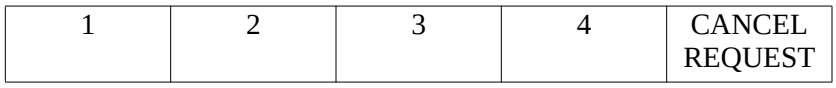
This procedure provides you with the average volume of fixer used to replenish a single sheet of film processed.

---

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

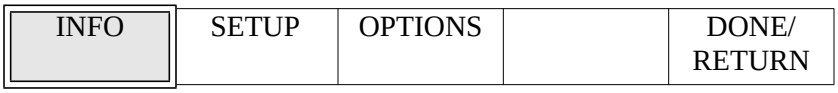


[2] Enter the 4-digit access code.



[3] Press the “MORE” key.

[4] Press the “INFO” key.



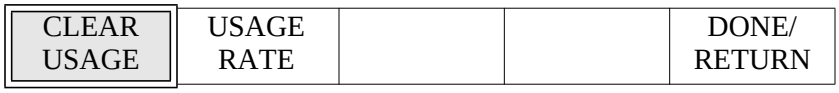
[5] Press the “USAGE” key.

[6] Press the “FIXER USAGE” key.

[7] Press the “USAGE RATE” key.

To clear the fixer rate information, do the steps below.

[8] Press the “CLEAR USAGE” key to clear both the total volume usage and the usage rate.



[9] When prompted, “ARE YOU SURE?” press the appropriate key:

- the “YES” key to clear the developer usage information and reset it to zero.
- the “CANCEL REQUEST” to continue recording the developer usage volume without resetting the volume to zero.

[10] Press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

EXIT SETUP?				
YES				CANCEL REQUEST

Selecting the Film Size for Each Setup Group

Description:

This procedure allows you to select which film size you want displayed in each of the 3 film setup groups.

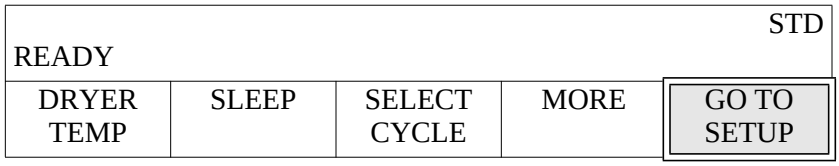
Group 1 you may select between the metric size 35 x 43 cm or the English size 14 x 17 in.

Group 2 you may select between the metric size 13 x 18 cm or the English size 5 x 7 in.

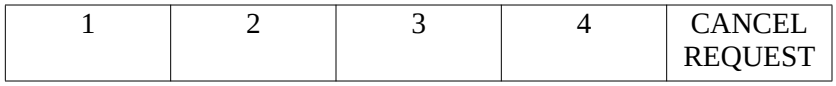
Group 3 you may select between the metric roll film size 100/105 mm or the English roll film size 3½ in.

Procedure:

[1] From the Walk-Up Menu, press the “GO TO SETUP” key.

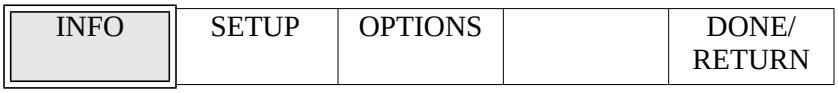


[2] Enter the 4-digit access code.



[3] Press the “MORE” key.

[4] Press the “INFO” key.



[5] Press the “USAGE” key.

[6] Press the “SETUP GROUPS” key.

[7] Press the appropriate key:

- the “SHOW METRIC” key to select the metric film size for that group
- the “SHOW U.S.” key to select the English film size for that group
- the “NEXT GROUP” key to advance to the next film setup group

Obtaining Film Usage Rates

Description:

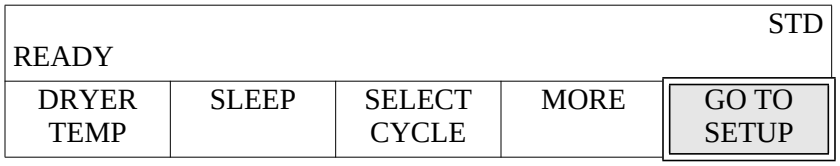
This procedure provides you with film usage information. You may obtain the quantity of films processed since the counter was last reset for any film size you select.

Note

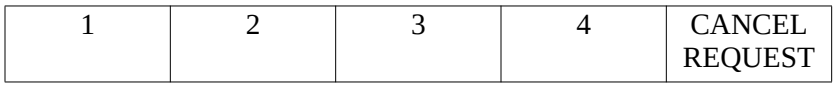
Before doing this procedure, be sure that you have completed the previous procedure on Page 73 that allows you to determine which film size you wish to include in each setup group.

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.

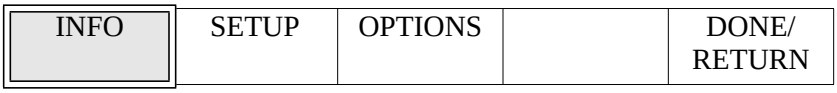


[2] Enter the 4-digit access code.



[3] Press the "MORE" key.

[4] Press the "INFO" key.



[5] Press the "USAGE" key.

[6] Press the "FILM USAGE" key.

[7] Press the appropriate key:

- the "▲" key to display the usage count for the next largest film size
- the "▼" key to display the usage count for the next smallest film size
- the "SHEET COUNT" key to display the number of films processed

To clear the film usage information, do the steps below.

[8] Press the "CLEAR USAGE" key.

[9] When prompted, "ARE YOU SURE?" press the appropriate key:

- the "YES" key to clear the film usage information and reset it to zero.
- the "CANCEL REQUEST" to continue recording the film usage information without resetting it to zero.

[10] Press the "DONE/RETURN" key repeatedly until you return to the display shown below. Then press the "YES" key to return to the Walk-Up Menu.

Obtaining the Processor's Software Version

Description:

This procedure allows you to determine what versions of software are operating in your Processor. You may display the software version for the following programs:

- Boot
- Main
- Accumulator Boot
- Accumulator Main

Procedure:

[1] From the Walk-Up Menu, press the "GO TO SETUP" key.

READY				STD
DRYER TEMP	SLEEP	SELECT CYCLE	MORE	GO TO SETUP

[2] Enter the 4-digit access code.

1	2	3	4	CANCEL REQUEST

[3] Press the "MORE" key.

▲	▼	CYCLE	MORE	DONE/ RETURN

[4] Press the "INFO" key.

INFO	SETUP	OPTIONS		DONE/ RETURN

[5] Press the "SW VERSION" key.

USAGE	DIAG	SW VERSION	MORE	DONE/ RETURN

[6] Press the appropriate key. The software version will appear on the Display Screen.

- the "BOOT" key to display the boot version
- the "MAIN" key to display the main program version
- the "ACCUM BOOT" key to display the accumulator boot version
- the "ACCUM MAIN" key to display the accumulator main program version

BOOT	MAIN	ACCUM BOOT	ACCUM MAIN	DONE/ RETURN

[7] When you are done displaying the different software versions, press the “DONE/RETURN” key repeatedly until you return to the display shown below. Then press the “YES” key to return to the Walk-Up Menu.

Other Functions

Description:

There are a few other menu options that you might see that have not been discussed in this Operator Manual. Two of the options appear on the display shown below. The operator should never have any need to access these options. These options should be accessed only by a trained, service provider.

The “DIAG” key allows a trained, service provider access to the internal diagnostics that reside in the Processor.

The “MORE” key allows a trained, service provider access to additional diagnostic functions and provides the capability for the service provider to print error history logs.

Replenishment Solutions

Mixing the Developer and Fixer Solutions

Important

- See Table 3 on Page 21 to determine which type of chemicals to use with the selected cycle.
- When mixing chemicals, follow all instructions and precautions.
- Do not mix more than a 2-week supply of developer and fixer replenisher.

[1] To ensure that replenishment does not occur while the solutions are being mixed, move the Main Circuit Breaker CB1 to the “O” position.

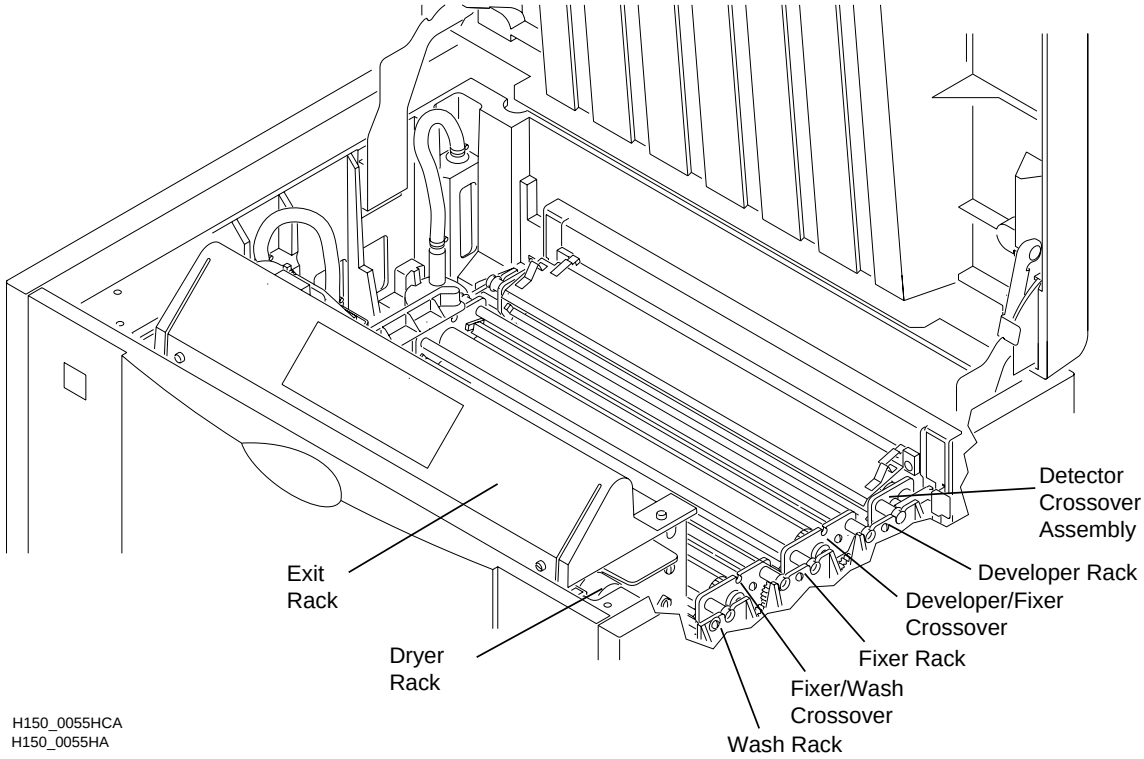
[2] Determine which type of chemicals is needed for the film processing cycle that you selected. See the table on Page 21.

[3] Following all directions provided with the solutions, mix at least 19 litres (5 gallons) of each solution.

Filling the Processor Tanks

[1] Check that the Racks are in the correct positions.

Figure 9 **Checking the Positions of the Racks**



[2] Close the Developer and Fixer Drains. See Figure 10 on Page 81.

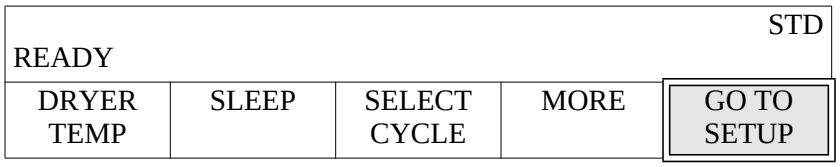
Important

The Replenishment Pumps automatically start when the Processor is turned on.

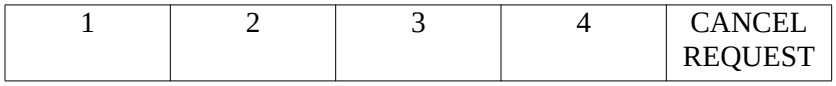
[3] Move the main Circuit Breaker CB1 to the “|” position.

[4] Wait for the Walk-Up Menu to appear on the Display Panel.

[5] From the Walk-Up Menu, press the “GO TO SETUP” key.



[6] Enter the 4-digit access code.



[7] Press the “MORE” key.

[8] Press the “OPTIONS” key.

[9] Press the “REPLEN MODE” key.

Important

- If the developer and fixer Tanks of the Processor are empty and you do not press “TANK FILL,” a “Fill Error” will occur in approximately 4 minutes.
- The developer and fixer Tanks will not fill if the Top Cover is open.
- The developer and fixer Tanks require approximately 10 minutes to fill with solution.
- An Tank Fill error message will appear on the Display Panel while the Tanks are filling.
- Once the Tanks are full, the Replenishment Pumps automatically turn off and the normal, Processor warm-up period begins.

[10] Press the “TANK FILL” key.

[11] Press the “DONE/RETURN” key repeatedly until you return to the Walk-Up Menu.

[12] If you are using RP chemicals, wait until the Tanks have been filling for approximately 1 minute. Then add 190 mL (6.5 fl oz) of starter solution to the drive side of the Processor’s developer Tank.

[13] After the Replenishment Pumps stop operating, check that:

(a) the level of both the developer and fixer solutions in the Tanks is at the overflow limit.

(b) there is some movement on the surface of the developer and fixer solutions to indicate that the Recirculation Pump is operating.

Draining the Processor Tanks

Warning

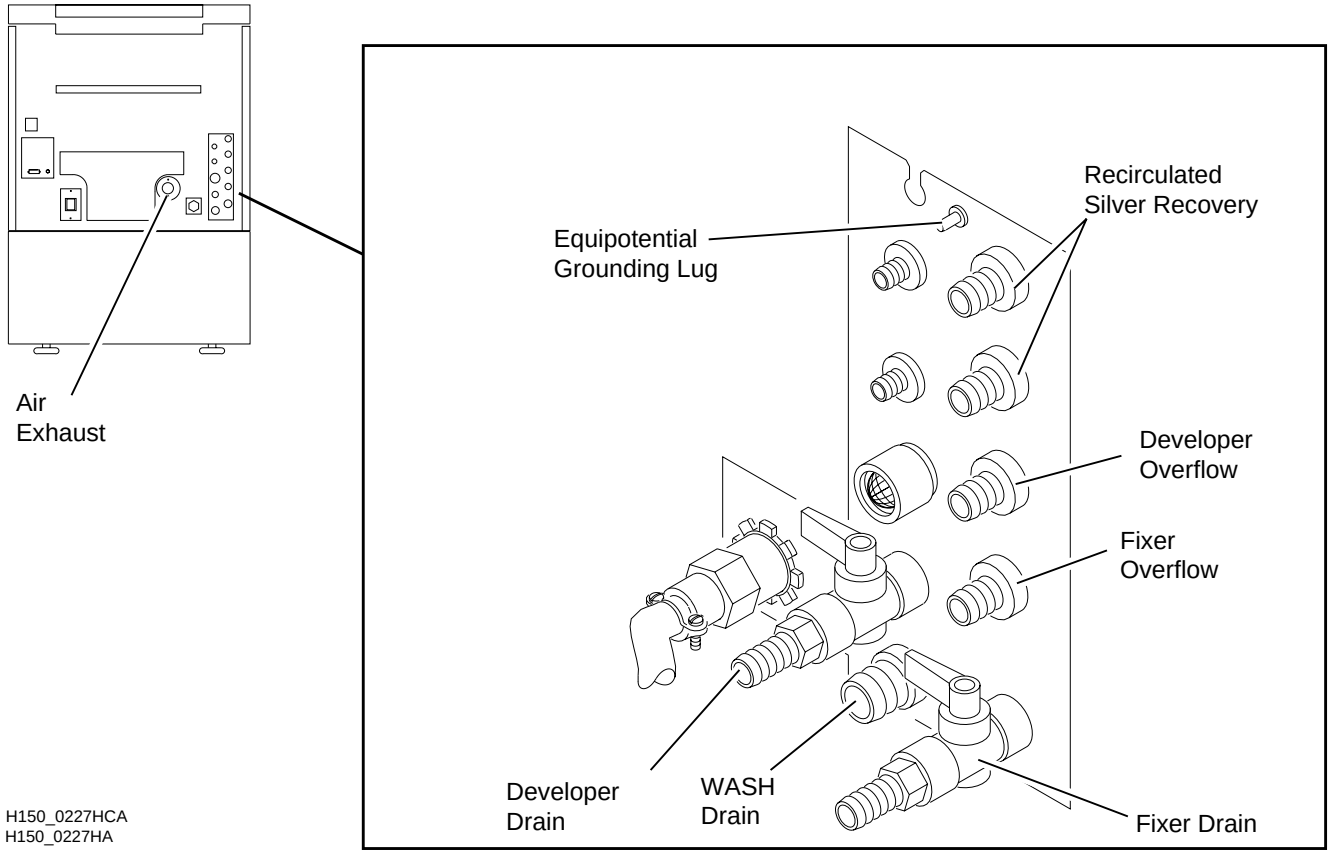
Check that the Drain and Drain tubing meet all the requirements outlined in the Site Specifications, Publication No. 5B6329.

[1] Open the Fixer and Developer Drain Valves.

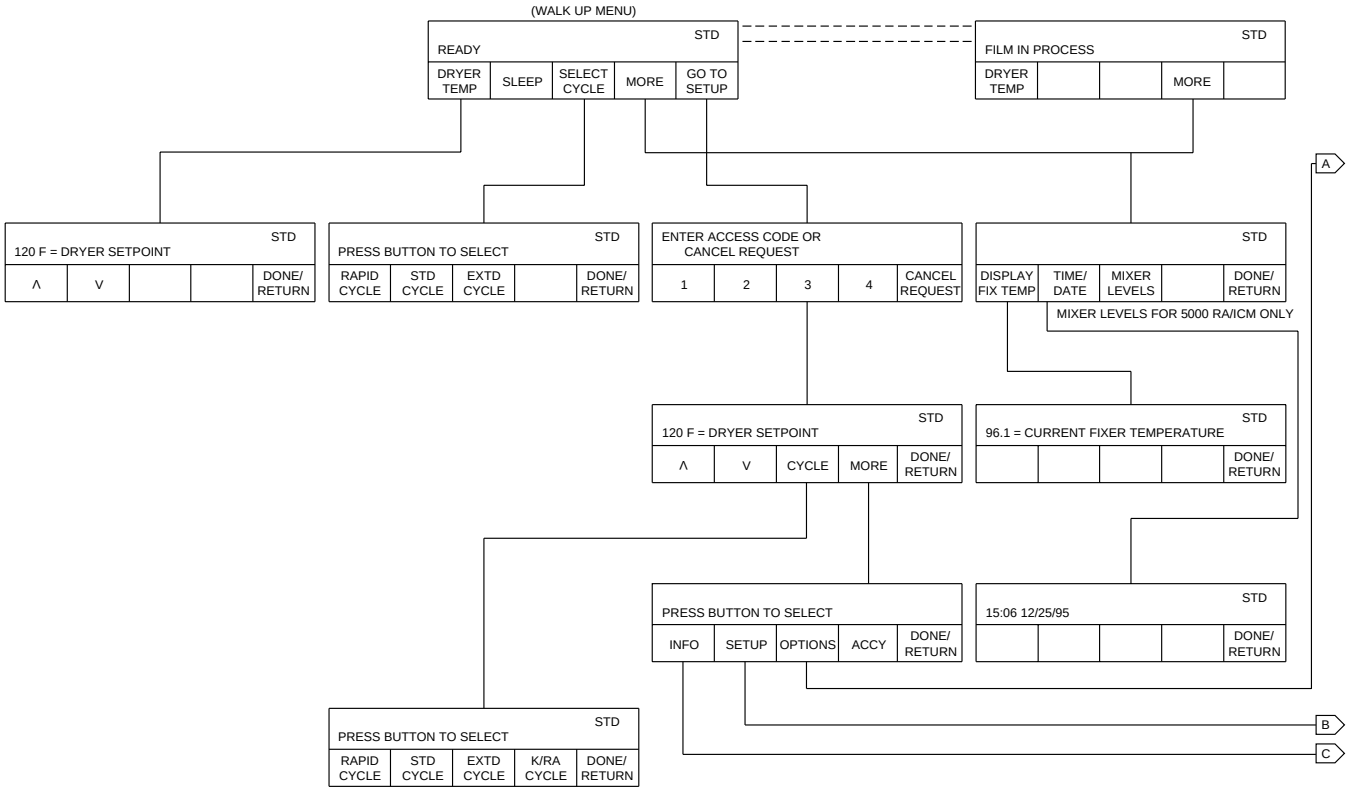
Note

The Wash Tank does not need to be drained.

Figure 10 **Opening or Closing the Fixer and Developer Drain Valves**



Menu Flowchart


(WALK UP MENU)
STD
READY
DRYER TEMP
SLEEP
SELECT CYCLE
MORE
GO TO SETUP
STD
FILM IN PROCESS
DRYER TEMP
MORE
A
STD
120 F = DRYER SETPOINT
Λ
V
DONE/ RETURN
STD
PRESS BUTTON TO SELECT
RAPID CYCLE
STD CYCLE
EXTD CYCLE
DONE/ RETURN
ENTER ACCESS CODE OR CANCEL REQUEST
1
2
3
4
CANCEL REQUEST
STD
DISPLAY FIX TEMP
TIME/ DATE
MIXER LEVELS
DONE/ RETURN
MIXER LEVELS FOR 5000 RA/ICM ONLY
STD
120 F = DRYER SETPOINT
Λ
V
CYCLE
MORE
DONE/ RETURN
STD
96.1 = CURRENT FIXER TEMPERATURE
DONE/ RETURN
PRESS BUTTON TO SELECT
INFO
SETUP
OPTIONS
ACCY
DONE/ RETURN
STD
15:06 12/25/95
DONE/ RETURN
B
C
STD
PRESS BUTTON TO SELECT
RAPID CYCLE
STD CYCLE
EXTD CYCLE
K/RA CYCLE
DONE/ RETURN

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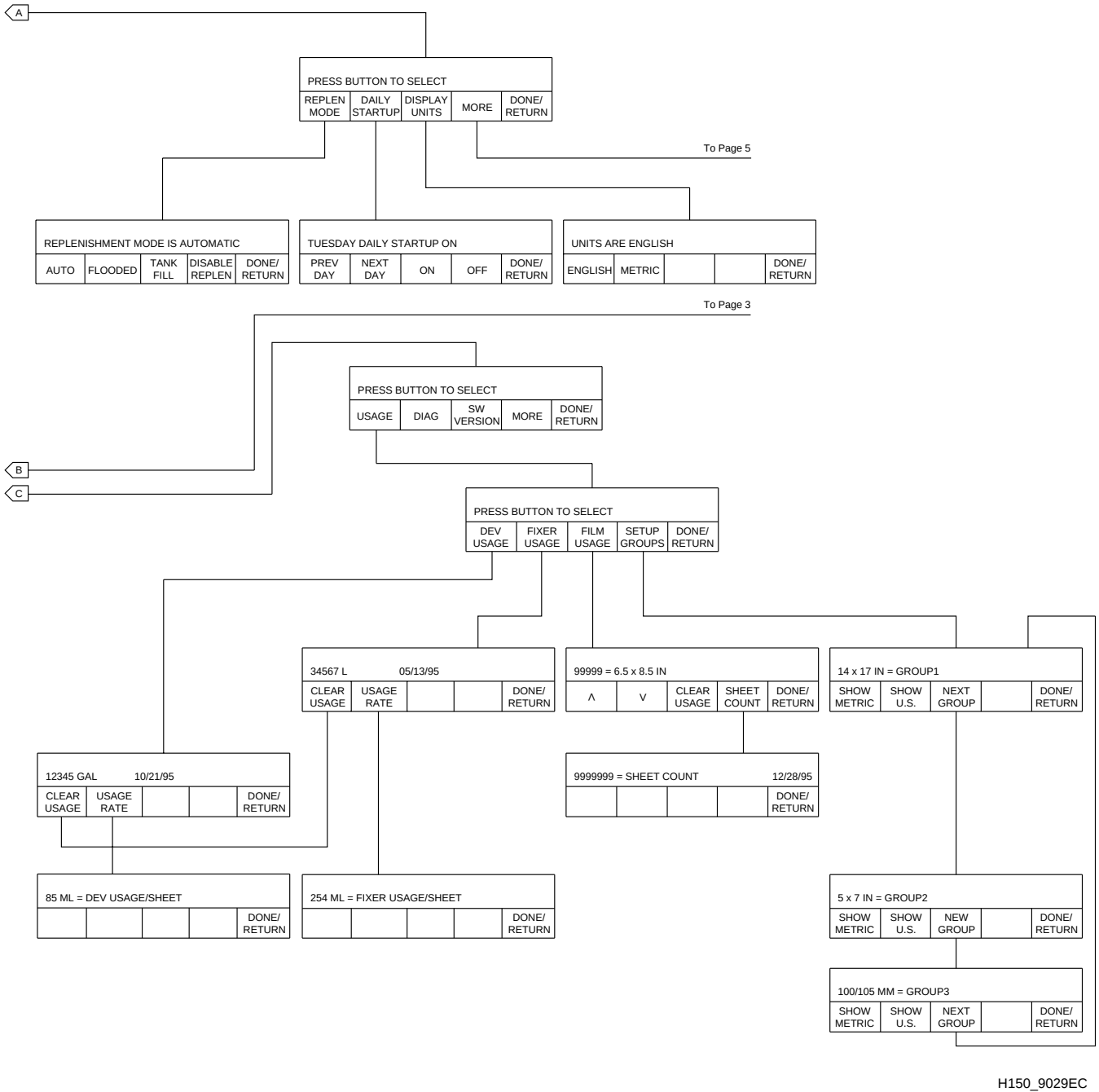
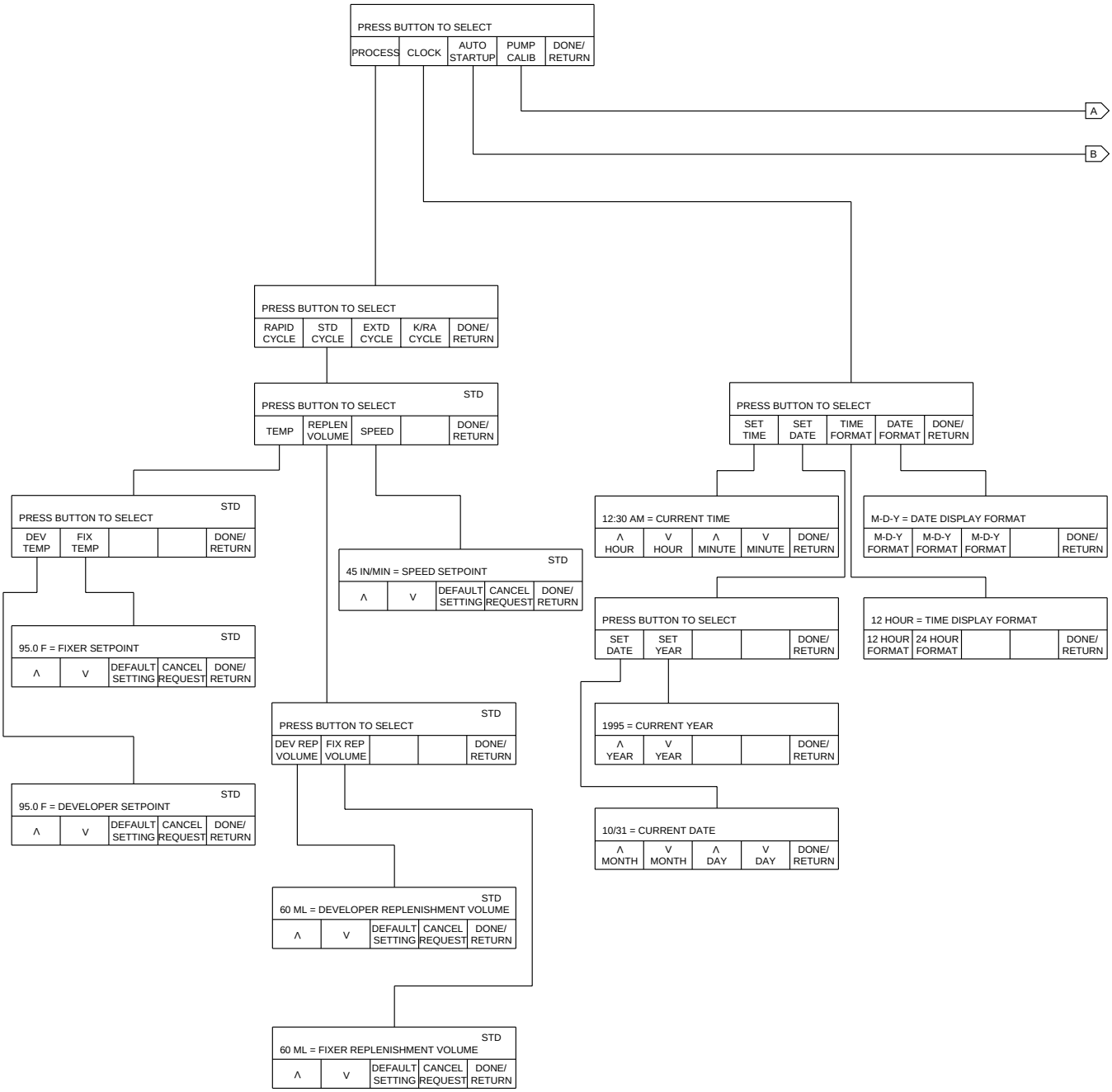
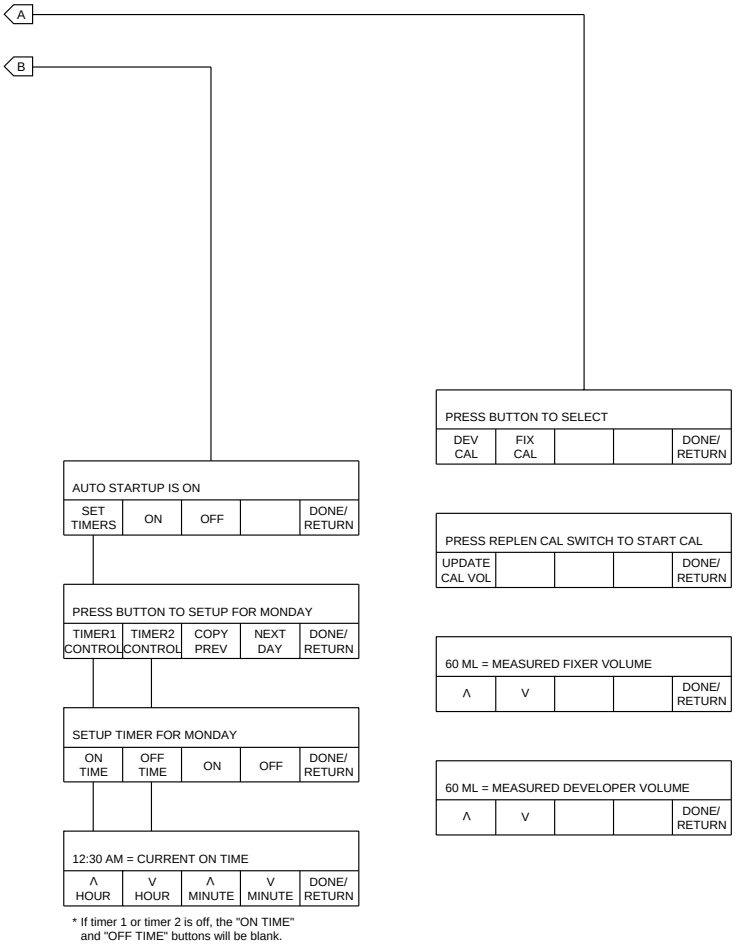

A
PRESS BUTTON TO SELECT
REPLEN MODE
DAILY STARTUP
DISPLAY UNITS
MORE
DONE/ RETURN
To Page 5
REPLENISHMENT MODE IS AUTOMATIC
AUTO
FLOODED
TANK FILL
DISABLE REPLEN
DONE/ RETURN
TUESDAY DAILY STARTUP ON
PREV DAY
NEXT DAY
ON
OFF
DONE/ RETURN
UNITS ARE ENGLISH
ENGLISH
METRIC
DONE/ RETURN
To Page 3
PRESS BUTTON TO SELECT
USAGE
DIAG
SW VERSION
MORE
DONE/ RETURN
B
C
PRESS BUTTON TO SELECT
DEV USAGE
FIXER USAGE
FILM USAGE
SETUP GROUPS
DONE/ RETURN
34567 L 05/13/95
CLEAR USAGE
USAGE RATE
DONE/ RETURN
99999 = 6.5 x 8.5 IN
^
v
CLEAR USAGE
SHEET COUNT
DONE/ RETURN
14 x 17 IN = GROUP1
SHOW METRIC
SHOW U.S.
NEXT GROUP
DONE/ RETURN
12345 GAL 10/21/95
CLEAR USAGE
USAGE RATE
DONE/ RETURN
9999999 = SHEET COUNT 12/28/95
DONE/ RETURN
85 ML = DEV USAGE/SHEET
DONE/ RETURN
254 ML = FIXER USAGE/SHEET
DONE/ RETURN
5 x 7 IN = GROUP2
SHOW METRIC
SHOW U.S.
NEW GROUP
DONE/ RETURN
100/105 MM = GROUP3
SHOW METRIC
SHOW U.S.
NEXT GROUP
DONE/ RETURN

H150_9029EC

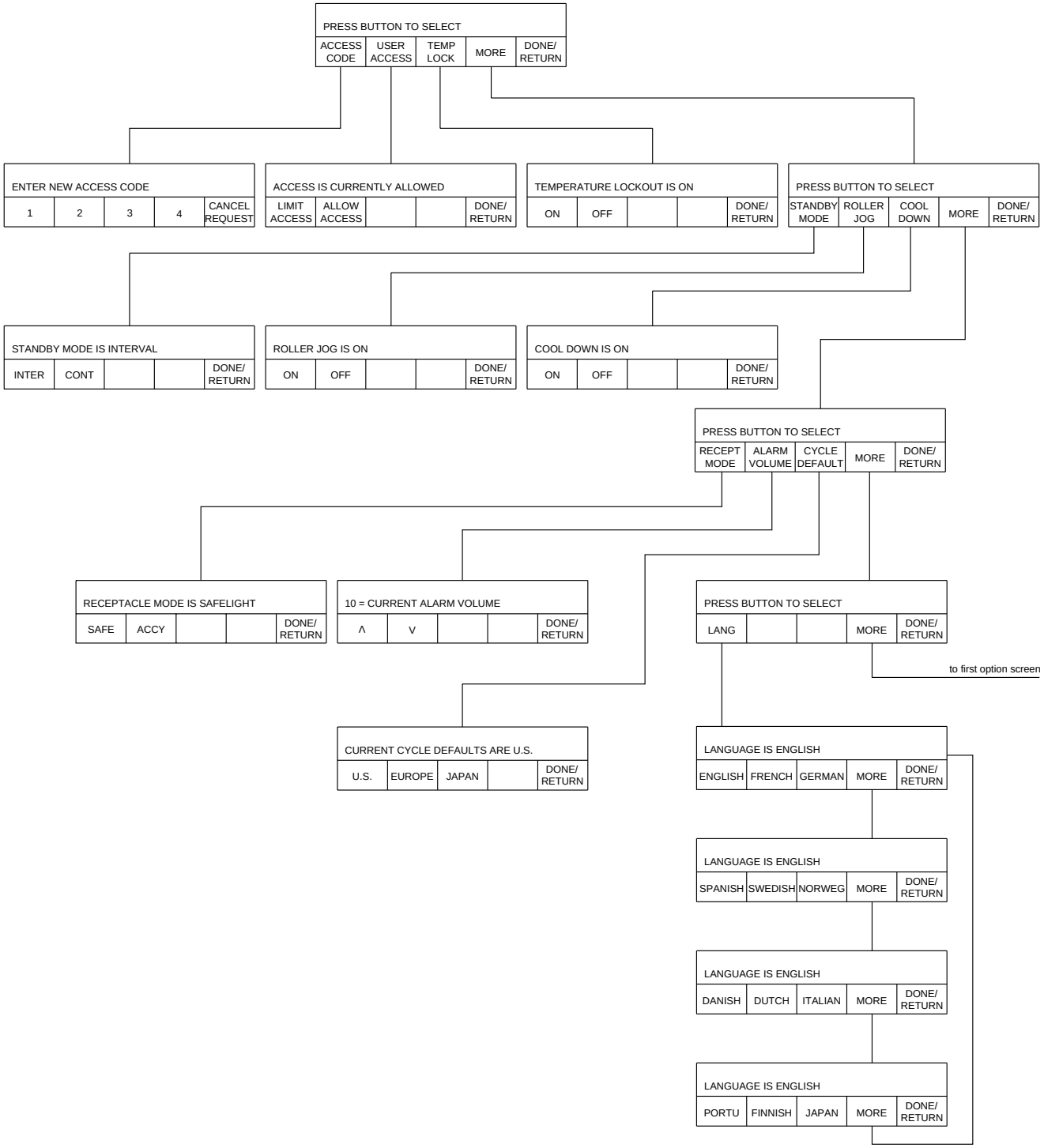

PRESS BUTTON TO SELECT
PROCESS
CLOCK
AUTO STARTUP
PUMP CALIB
DONE/ RETURN
A
B
PRESS BUTTON TO SELECT
RAPID CYCLE
STD CYCLE
EXTD CYCLE
K/RA CYCLE
DONE/ RETURN
STD
PRESS BUTTON TO SELECT
TEMP
REPLEN VOLUME
SPEED
DONE/ RETURN
PRESS BUTTON TO SELECT
SET TIME
SET DATE
TIME FORMAT
DATE FORMAT
DONE/ RETURN
STD
PRESS BUTTON TO SELECT
DEV TEMP
FIX TEMP
DONE/ RETURN
STD
45 IN/MIN = SPEED SETPOINT
Λ
V
DEFAULT SETTING
CANCEL REQUEST
DONE/ RETURN
12:30 AM = CURRENT TIME
Λ HOUR
V HOUR
Λ MINUTE
V MINUTE
DONE/ RETURN
M-D-Y = DATE DISPLAY FORMAT
M-D-Y FORMAT
M-D-Y FORMAT
M-D-Y FORMAT
DONE/ RETURN
STD
95.0 F = FIXER SETPOINT
Λ
V
DEFAULT SETTING
CANCEL REQUEST
DONE/ RETURN
PRESS BUTTON TO SELECT
SET DATE
SET YEAR
DONE/ RETURN
12 HOUR = TIME DISPLAY FORMAT
12 HOUR FORMAT
24 HOUR FORMAT
DONE/ RETURN
STD
PRESS BUTTON TO SELECT
DEV REP VOLUME
FIX REP VOLUME
DONE/ RETURN
1995 = CURRENT YEAR
Λ YEAR
V YEAR
DONE/ RETURN
STD
95.0 F = DEVELOPER SETPOINT
Λ
V
DEFAULT SETTING
CANCEL REQUEST
DONE/ RETURN
10/31 = CURRENT DATE
Λ MONTH
V MONTH
Λ DAY
V DAY
DONE/ RETURN
STD
60 ML = DEVELOPER REPLENISHMENT VOLUME
Λ
V
DEFAULT SETTING
CANCEL REQUEST
DONE/ RETURN
STD
60 ML = FIXER REPLENISHMENT VOLUME
Λ
V
DEFAULT SETTING
CANCEL REQUEST
DONE/ RETURN

H150_9030EC



* If timer 1 or timer 2 is off, the "ON TIME" and "OFF TIME" buttons will be blank.

H150_9031EC


PRESS BUTTON TO SELECT
ACCESS CODE
USER ACCESS
TEMP LOCK
MORE
DONE/ RETURN
ENTER NEW ACCESS CODE
1
2
3
4
CANCEL REQUEST
ACCESS IS CURRENTLY ALLOWED
LIMIT ACCESS
ALLOW ACCESS
DONE/ RETURN
TEMPERATURE LOCKOUT IS ON
ON
OFF
DONE/ RETURN
PRESS BUTTON TO SELECT
STANDBY MODE
ROLLER JOG
COOL DOWN
MORE
DONE/ RETURN
STANDBY MODE IS INTERVAL
INTER
CONT
DONE/ RETURN
ROLLER JOG IS ON
ON
OFF
DONE/ RETURN
COOL DOWN IS ON
ON
OFF
DONE/ RETURN
PRESS BUTTON TO SELECT
RECEPT MODE
ALARM VOLUME
CYCLE DEFAULT
MORE
DONE/ RETURN
RECEPTACLE MODE IS SAFELIGHT
SAFE
ACCY
DONE/ RETURN
10 = CURRENT ALARM VOLUME
^
V
DONE/ RETURN
PRESS BUTTON TO SELECT
LANG
MORE
DONE/ RETURN
to first option screen
CURRENT CYCLE DEFAULTS ARE U.S.
U.S.
EUROPE
JAPAN
DONE/ RETURN
LANGUAGE IS ENGLISH
ENGLISH
FRENCH
GERMAN
MORE
DONE/ RETURN
LANGUAGE IS ENGLISH
SPANISH
SWEDISH
NORWEG
MORE
DONE/ RETURN
LANGUAGE IS ENGLISH
DANISH
DUTCH
ITALIAN
MORE
DONE/ RETURN
LANGUAGE IS ENGLISH
PORTU
FINNISH
JAPAN
MORE
DONE/ RETURN

H150_9032EC

Preventive Maintenance

Weekly

Important

Reliable operation of the Processor requires that you clean, adjust, and lubricate all parts correctly. More frequent maintenance may be necessary because of site conditions or actual usage. The following guidelines are for Processors installed according to the specifications in this publication. For monthly and quarterly maintenance, contact your trained service personnel.

Warning

Wear rubber gloves, safety glasses, and protective clothing when doing any daily maintenance procedure. Report any change in the operating condition of the Processor to your service personnel.

[1] Move the main Circuit Breaker CB1 on the Processor to the "O" position and the wall power switch to the "OFF" position.

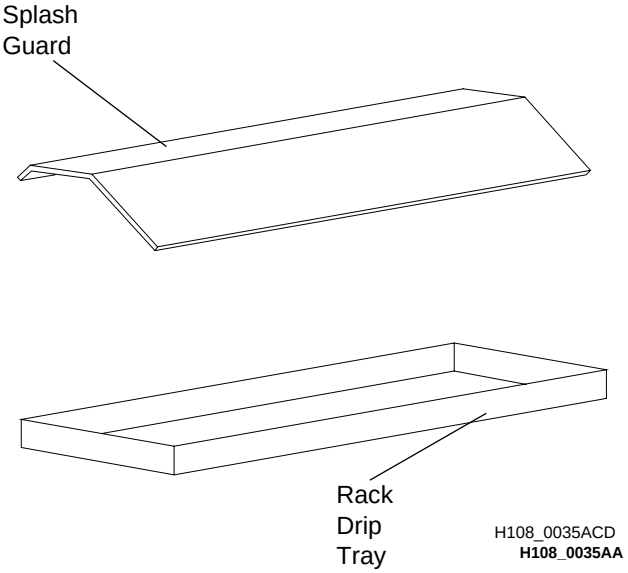
[2] Turn off the water supply.

[3] Lift the Top Cover.

Caution

- Handle these assemblies carefully to prevent changing the alignment. **Do not** wash the Racks and Crossovers with water hotter than 44°C (110°F). **Do not** clean the Racks, Crossovers, or Squeegee Rollers using abrasive materials or alcohol.
- To prevent fixer or developer contamination when you remove the Fixer or Developer Rack, place the Splash Guard between the developer and fixer Tanks. Use the Rack Drip Tray when you remove or install any of the Racks.

Figure 11 **Using the Splash Guard and Drip Tray**



[4] Remove the following parts from the Processor.

- Wet Section Cover
- Evaporation Covers
- Water Reservoir
- all Crossovers
- Wash Rack

[5] Rinse the 3 Crossovers, Troughs, Water Reservoir, and the Wash Rack with warm water, no hotter than 44°C (110°F). Wipe the Rollers and the Guide Shoes with a damp, soft, synthetic sponge.

[6] Allow the Detector Crossover to air dry before you install it in the Processor.

[7] Wipe any chemical deposits from the processing section of the Processor.

[8] Check that all Rollers on all Crossovers and on the Wash Rack rotate freely. Check the squareness of the Crossovers and the Wash Rack.

[9] Check that the Crossover Troughs are not broken or cracked.

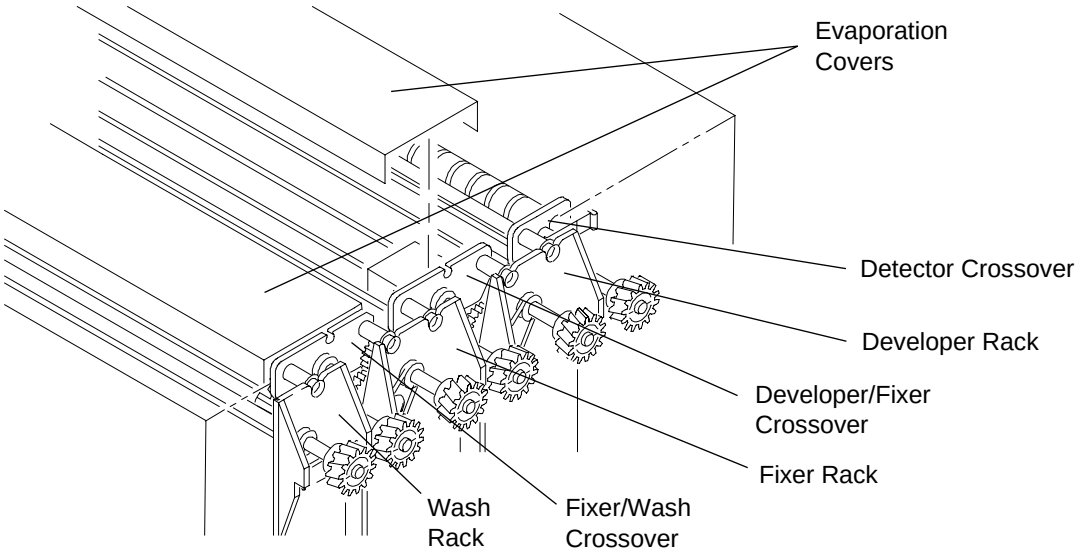
[10] Install the following parts into the Processor. Check that each assembly is firmly seated.

- Wash Rack
- all Crossovers
- Water Reservoir
- Evaporation Covers
- Wet Section Cover

[11] Turn the Processor on and check for correct operation.

[12] Process a test film and check the transport assemblies.

Figure 12 **Installing the Racks and Crossovers**



H104_0072BCG
H104_0072BA

Transport Failure						
	Surface Artifacts					
		Abnormal Film Densities				
			Wet Films			
				Low Solution Levels		
					Overlapping of Films	
•					•	Film Feeding Error **Feed only single thicknesses of film. Feed next film only after film feed signal. If there is no film feed signal, refer the difficulty to qualified personnel.**
•	•	•	•			Feed only compatible films.
•					•	Check that all Racks and Crossovers are seated correctly.
•	•					Check that the surfaces of all the Rollers are clean and smooth.
•	•		•			Check that all Dryer Air Tubes are installed.
	•		•			Remove any dirt from the Dryer Rollers and Air Tubes, especially the Air Tube slot and Air Diffuser. Use a Bottle Brush and rinse with water.
	•	•	•	•		Check the settings for correct replenishment. Check the replenishment system: tubing kinks, Pump operation, Detector Switches, and Film Detector.
	•					Adjust the Dryer temperature control setting to the **lowest** possible temperature consistent with good film drying quality.
	•					Clean the Feed Tray and Detector Rollers.
•	•	•	•		•	Change any chemicals that were not mixed correctly, are exhausted, or are contaminated. Change the Developer Filter. Check that replenishment rates are correctly set. Fill the Replenishment Tanks if necessary. **Mix the developer replenisher in quantities not to exceed a 2-week supply. Always use a Splash Guard and Rack Drip Tray when lifting the Racks to prevent contamination. Mix chemicals as directed.**
•				•		Check that the Drain Valves are completely closed. Check that the Tanks are full.
•	•				•	Check that *all* Rollers, Gears, Sprockets, and Idlers are engaged and rotate freely.
•	•				•	Replace any Rollers that have broken or worn Gudgeons.

Transport Failure	Surface Artifacts	Abnormal Film Densities	Wet Films	Low Solution Levels	Overlapping of Films	
•	•				•	Replace any Bearings that do not allow the Rollers to rotate freely.
•	•					If incoming wash water is dirty, clean the Wash Rack, Wash Tank, and Water Reservoir thoroughly. Change the incoming water Filter. Be sure to use the correct water Filter.
			•			Check that the Processor is vented according to the Site Specifications, publication number 5B6329. Also see the Installation Instructions, publication number 5B6330.
	•	•	•			heck incoming water temperature. Temperature must be between 4°C (40°F) and 29°C (85°F).
		•				Check that the correct Bulb and Safelight Filter are in the Safelight and at the correct distance from the Feed Tray and work surface.
•		•				Check that the Wet Section Cover, Top Cover, and Panels are secure on the Processor. Check that there are no leaks in the Lighttight Gasket.
•						If 10 x 10 cm films fail to transport reliably, feed the sheets of films diagonally.
					•	Check the time delay. For all transport speeds, the film feed signal should sound once the trailing edge of the film has advanced 76 mm (3 in.) into the Processor.
			•			Ambient conditions are out of specification.
•						If the solution temperature is low, the Processor will not accept film. Check that the temperature lockout is selected.
				•		Check that solution Level Probes are clean and free from buildup. Check that all external replenishment lines are without kinks or air bubbles.

Warranty

Kodak warrants this *Kodak X-Omat* 3000 RA Processor to function correctly for one year from the date of initial installation, when installed within one year from date of shipment.

Warranty Repair Coverage

If this equipment does not function correctly during the warranty period, the dealer (for *Kodak X-Omat* 3000 RA Processors) who sold the equipment will provide or arrange for repair of the equipment during the dealer's normal working hours. Such repair service will include any adjustments and/or replacement of parts required to maintain your equipment in good working order.

How To Obtain Service

Should the equipment require service, refer to the sales contract for details on whom to call for service, or contact the dealer (for *Kodak X-Omat* 3000 RA Processors) who sold the equipment.

Limitations

Warranty service is limited to the contiguous United States, the island of Oahu in Hawaii, and certain areas of Alaska.

This warranty does not cover—

- circumstances beyond the control of Kodak
- misuse
- abuse
- attachments
- accessories
- alterations not marketed by Kodak (including service or parts to correct problems resulting from the use of such attachments, accessories, or alterations)
- failure to follow the operating instructions recommended by Kodak
- supply items

Kodak makes no other warranties, express or implied, for this equipment.

Repair without charge is the only obligation of both Kodak and the dealer under this warranty. Kodak will not be responsible for any consequential or incidental damages resulting from the sale, use, or improper functioning of this equipment, even if loss or damage is caused by the negligence or other fault of Kodak.

Such damages for which Kodak will not be responsible, include, but are not limited to, loss of revenue or profit, downtime costs, loss of use of the equipment, cost of any substitute equipment, facilities or services or claims of your customers for such damages.

This limitation of liability will not apply to claims for injury to persons or damage to property caused by the sole negligence or fault of Kodak or by persons under its direction or control.

Publication History Table

Print Date	Pub. No.	ECO No.	Affected Pages	File Name	Description
OCT95	5B6328	2650-030	All Pages	om3434_1_030.doc	1st Printing of Manual
NOV95	5B6328	2650-039	Front Cover, 15, 16, and Back Cover	om3434_1_039.doc	Graphic Unification Printing
JAN98	5B6328	2650-039	All Pages	om34300.fm	First CD-ROM printing. Content is identical to November 1995 version; formatting may vary from print version.
SEP98	5B6328	2650-190	All Pages	om3434_1_30sep98.doc	Updated for patient contact per MDD regulations. This printing supersedes the November 1995 paper copy version.

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